

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2548.—VOL. LIV.

London, Saturday, June 21, 1884.

[WITH SUPPLEMENT.] { PRICE SIXPENCE.
BY POST, 2d. PER ANNUM.

MR. JAMES H. CROFTS, STOCK AND SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING STOCKS and SHARES (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in STOCKS and SHARES not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, London—SOUTH CORNWALL BANK, St. Austell.

TELEPHONE NUMBER 1003.

FOR SALE, SHARES in the following MINING COMPANIES:—

Asia Minor. Guinea Coast Gold. Rio Tinto.
Akankoo, fully paid. Great Laxey. Ruby.
ditto, 17s. 9d. paid Gunnislake (Clitter) Rhodes Reef.
Almada. Hoover Hill. Richmond.
Bedford United. Home Mines Trust. Roman Gravels.
Bratsberg. Indian Consolidated. Schwab's Gully.
Cankim Bamboo. Indian Glenrock. Spitzkop.
Carri Camborne. Javall. South Caradon.
Callao Bis. Kapanga. South Condurrow.
Chile Gold. Killifreth. South Darren.
Colombian Hydraulic. Kongberg. South East Wynaad.
Consolidated. La Plata (New). South Devon United.
California. Last Chance. South Penstrith.
Colorado. Leadhills. Tambacherry.
Canada Copper. Lisbon-Berlyn. Tankerville Gt. Con.
Chonales. Michipicoten. Tolima A.
Cor. South Australian Copper. Mons. ditto B.
Copper. Mounts Bay. Transvaal Gold.
Denver. Mysore Gold. Treavaunance.
Devon Consols. New Caradon. United Mexican.
Devon Friendship. New Cailao. Victoria Gold.
Devon United. New Emma. Van.
Dolcath. New Quebrada. Wheal Agar.
Don Pedro. North Blue Hills. Wheal Bassett.
Drakewells. New Kitty. West Callao.
Duchy Pen. Nouveau Monde. West Phoenix.
East Hill. North Penstrith.
Eberhardt. New West Caradon. West Caradon.
East Caradon. Old Shepherds. West Crebor.
East Lovell. Organos. West Polbreen.
East Wheal Rose. Organa. West Kitty.
Ecton. Oscar. West Poldice.
Flagstaff. Potosi (Old). Wheal Coates.
Frongoch. Port Phillip. Wheal Crebor.
Frontino. Potosi Copper. Wheal Jane.
Goginan. Phoenix United. Wheal Kitty.
Gold Coast. Panuelillo. Wheal Silver & Lan-
Grogwinion. Prince of Wales. teglos.
Postans. Wynand Perseverance.

** ANY OF THE ABOVE SHARES WILL BE SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

BUSINESS at CLOSE PRICES in all Market TIN, COPPER, and LEAD SHARES

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS — SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

FOREIGN BONDS — SPECIAL BUSINESS.—Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

AMERICAN AND CANADIAN STOCKS AND SHARES—SPECIAL BUSINESS.—Fortsightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

GOLD AND SILVER MINES.—SPECIAL BUSINESS in ALL marketable INDIAN GOLD SHARES, and in Colombian Hydraulic, California, Callao Bis., Gold Coast, Guineas Gold Coast, Kongberg, New Callao, Oscar, West Callao, Tolima A, Tolima B, La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Chile, Nouveau Monde, Ruby, Richmond, Victoria.

SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

MISCELLANEOUS SHARES of all DESCRIPTIONS BOUGHT or SOLD—SPECIAL BUSINESS:—Brighton Aquarium, General Credit, Hudson Bay, Native Guano, Suez Canal, Westminster Aquarium, and Hotel Shares.

SHARES SOLD FOR FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

ELECTRIC LIGHT SHARES — SPECIAL BUSINESS. Anglo-American Hammond. Swan.
Brush. Maxim-Weston.

Shares sold for cash, account, or for forward delivery (one, two, or three months) on deposit of 20 per cent.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

TRANSVAAL GOLD FIELDS.—SPECIAL BUSINESS in all Transvaal Shares, including LISBON-BERLYN, TRANSVAAL, SPITZKOP, SCHWAB'S GULLY.

SHARES IN THE ABOVE SOLD FOR FORWARD DELIVERY ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

ESTABLISHED 1842.

M R. W. H. BUMPUS, STOCK AND SHARE BROKER,

AND MINING SHARE DEALER,

THREADNEEDLE STREET, LONDON, E.C.

ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGER SECURITIES and MISCELLANEOUS SHARES of every description.

RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHES, and all the LEADING INVESTMENTS ACCOUNTS OPENED FOR THE FORTNIGHTLY SETTLEMENT.

A List of Investments free on application.

Mr. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Almada. 50 Goginan. 50 Potosi (New).
50 Asia Minor. 100 Gold Coast. 100 Prince of Wales.
50 Bratsberg. 100 Great Laxey. 100 Princess of Wales.
50 Birdseye Creek. 100 Home Mines Trust. 50 Panuelillo.
50 Colombian Hydraulic. 25 Killifreth. 100 Pen-y-Oresedd.
50 Chile Gold. 50 Kapanga. 25 Roman Gravels.
50 Colorado. 100 Lake Superior. 50 Ruby.
50 California Gold. 40 Leadhills. 40 Richmond.
50 Callao Bis. 150 La Plata. 100 South Caradon.
2 Dolcoath. 50 Minera. 100 Tresvauance.
20 Devon Consols. 100 Mounts Bay. 100 Tolima A.
100 Gold Coast. 100 New Callao. 100 Topocilla.
100 West Callao. 100 Nouveau Monde. 100 United Mexican.
100 Duchy Pen. 200 West Callao. 100 West Crebor.
100 East Wheal Rose. 25 New Kitty. 100 West Grenville.
3 East Pool. 50 N. Trumpet Consols. 100 West Kitty.
50 Eberhardt. 25 New Kitty. 100 West Kitty.
50 Ecton. 50 Organos. 100 West Kitty.
75 Frontino. 25 Orita. 50 West Crebor.
50 Frongoch. 50 Old Shepherds. 100 West Polbreen.
N.B.—Prices of the above on application, or offers may be made. Several lots of shares in this list are for sale considerably under the price at which they are quoted in Circulars and elsewhere.

SPECIAL BUSINESS at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

WILLIAM HENRY BUMPUS, SWORN BROKER,

OFFICES: 41, THREADNEEDLE STREET, LONDON, E.C.

ESTABLISHED 1867.

BRITISH AND FOREIGN MINING OFFICES.

MESSRS. PETER WATSON AND CO.,

18, AUSTIN FRIARS,

OLD BROAD STREET, LONDON, E.C.

BANKERS: THE ALLIANCE BANK (Limited).

MESSRS. PETER WATSON AND CO.'S BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND METAL MARKETS—SHARE LIST, No. 865, VOL. XXV., for MAY month, is ready and will be sent to customers on application.

Annual Subscription..... 5s. I Single Copy..... 6d.

The Title Page and Index to our Eighteenth Volume are now ready, and can be obtained on application.

M R. A L F R E D E. C O O K ,
STOCK and SHARE DEALER.
9, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

MR. ALFRED E. COOKE is a BUYER and SELLER of Shares in the following list at CLOSEST MARKET QUOTATIONS FREE of COMMISSION.

Bratsberg Copper. Ecton Copper. Schwab's Gully Diamond.
Balkis Gold. Home Mines Trust. mon.
Callao Bis. Gold. La Plata Lead. South Kitty Tin.
Colombian Hydraulic Gold. Lisboa-Berlyn Gold. Treasevan Copper & Tin.
Carn Camborne Tin & Copper. Old Shepherds. Tolima A.
Corporation of South Australia Copper. Organs. Untd. Mexican Silver.
Cartago Gold. Orita Gold. Victoria Gold.
East Rose Lead. Potosi Gold. West Crebor Copper.
Ruby. South Caradon Copper. West Kitty Tin.
South Caradon. Wheal Crebor Copper.

MR. ALFRED E. COOKE can SELL Shares in the following list at LOWEST CURRENT QUOTATIONS, FREE of COMMISSION, either for CASH or FORTNIGHTLY SETTLEMENT:—

East Blue Hills. New West Caradon. Parrys.
East Lovell. New Caradon. Roman Gravels.
Goginan. Naupali. West Callao.
Kit Hill. New Callao. West Caradon.
Leadhills. Prince of Wales. West Polbreen.

TEN PER CENT. DEPOSIT.—Many of the above shares can be sold for settlement by arrangement at the end of July on payment of 10 per cent. deposit. Shares not found in the above list may be purchased on application.

The CURRENT QUOTATIONS appear in the Leading Article of the MINING JOURNAL; and in order to save unnecessary correspondence, customers are invited to make offers either to BUY or SELL shares at prices quoted on these quotations. The lowest prices will, however, be sent on receipt of postage for letter or telegram.

SCHWAB'S GULLY DIAMOND.

OSCAR GOLD.

VICTORIA GOLD.

SOUTH KITTY.

KONGSBERG.

FULL INFORMATION
AND
SPECIAL BUSINESS.

THE INVESTORS' GAZETTE.—New Number now ready. Post free on application.

ALFRED E. COOKE, 9, OLD BROAD STREET, LONDON.
(Opposite the Stock Exchange, with which the offices are in DIRECT TELEGRAPHIC COMMUNICATION.)
TELEPHONE NUMBER, 1285.

M R. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
Has Special Business in the following for cash or settlement by arrangement free of commission:—

Balis. 100 Gold Coast. 80 Potosi (New).
50 Alankoo. 50 Home Mines. 45 Ruby & Dunderberg.
40 Bratsberg. 50 Kapanga. 30 Richmond.
50 California. 50 La Plata. 20 Rio Tinto.
50 Chonales. 50 Lisboa-Berlyn. 30 Schwab's Gully.
100 Callao Bis. 50 Montana. 20 Tolima B.
50 Chonales. 100 Mounts Bay. 70 Treasevan.
25 Colorado. 50 New Callao. 50 Transvaal Gold.
50 Colombian. 50 Old Shepherds. 25 United Mexican.
50 Cor. So. Austra. Cop. 75 Old Shepherds. 75 Victoria Gold.
45 Ecton. 45 Organos. 60 West Callao.
50 East Rose. 50 Oscar Gold. 50 Pauillac.
The following SHARES WANTED for CASH:—
100 Chonales. 55 Home Mines. 50 Orita.
100 Colombian. 50 Old Shepherds. 20 United Mexican.
100 California. 50 Organos. 60 Victoria Gold.
Railways, Foreign Bonds, Gold and Silver Mines, Miscellaneous Shares, and all Stock Exchange Securities.

ESTABLISHED 1851.
BANKERS: LONDON AND WESTMINSTER.

M R. H. J. BARTLETT, STOCK AND SHARE DEALER,
30, GREAT ST. HELENS, LONDON, E.C.

Selected List of Investments post free on application.

Eighteenth Edition, now ready—"HOW TO INVEST"—post free 12 stamps.

STOCKS AND SHARES.

JOHN LENN AND CO.'S CIRCULAR, POST FREE,

contains Highest, Lowest, Latest Prices of all Stocks and Shares, also shows the return per cent. at a glance.

JOHN LENN AND CO.'S CIRCULAR, POST FREE,

The advice given in their former Circulars has enabled investors to make from 50 to 150 per cent. in a week.

JOHN LENN AND CO.'S CIRCULAR, POST FREE,

contains special information respecting the safest investments obtainable, paying from 5 to 12½ per cent.

JOHN LENN AND CO. (LIMITED), STOCK AND SHARE DEALERS, 4 and 5, GROCERS' HALL COURT, LONDON, E.C.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.

Established Twenty-five Years.

BANKERS: LONDON JOINT-STOCK.

POLBERRO, ST. AGNES.

The shares of this mine are in favour, and will advance probably to a very high figure. The mine has been inspected by gentlemen who are well known, and whose opinions are universally respected. Mr. REYNOLDS will be happy to furnish the particulars of their report, and to give to his correspondents any information in its power. The books of the company and all other particulars are open for inspection at the company's offices. The management is the same as that of West Kitty, and the property promises to be of a very high order. Mr. REYNOLDS directs attention to the fact that those who have purchased the shares can already obtain a fair profit. Mr. REYNOLDS further directs attention to the fact of his having been the first to introduce West Kitty, under very similar circumstances to those which now characterize Polberro, St. Agnes, and Mr. REYNOLDS with equal confidence recommends the latter company's shares. West Kitty, with at present 10s. per share paid, returns 10s. per share per annum as a minimum dividend with every prospect of further increase. When West Kitty's shares had only 2s. per share paid they were at a premium of £1 each.

Mr. REYNOLDS refers to his remarks on page 71.

F E R D I N A N D R. K I R K , STOCKBROKER,
5, BIRCHIN LANE, LONDON, E.C.

SPECIAL BUSINESS in the following:—
80 Birdseye Creek. 100 Chontales. 90 Organos.
50 Bratsberg. 30 Devon Consols. 30 Oscar Gold.
60 Callao Bis. 50 Home Mines Trust. 50 Tolima.
50 Chile Gold. 60 Montana. 50 Wheal Crebor.

SELLERS should state whether for cash or account, and name their price. Fortnightly accounts opened in Home Railways, Foreign Bonds, American and Canadian Railways, on receipt of the usual cover.

BANKERS: LONDON AND WESTMINSTER, Lothbury.

M R. C H A R L E S T H O M A S ,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

M R. A L F R E D T H O M A S ,
MINING ENGINEER, STOCK AND SHARE DEALER,
19, COLEMAN STREET, LONDON E.C.

ESTABLISHED 1852.

M R. H E N R Y J. T A L L E N T I R E ,
STOCK BROKER AND MINING SHARE DEALER.

SPECIAL BUSINESS in all Home and Foreign Mines at close prices.

JUNE CIRCULAR on application, containing valuable information and advice to Investors, post free.

SHARES SOLD for forward delivery in one to three months upon usual deposit.

THE APPLICATION LIST WILL BE CLOSED ON
24TH JUNE INSTANT.

The famous Silver Mines at Kongberg, worked by the Norwegian Government, have made large profits, which in the last 50 years alone have amounted to a total of at least £1,172,743, besides paying large sums to the Communes and for pensions, &c.; and although worked on a limited scale and without the advantage of improved modern machinery.

The KONGSBERG CONSOLIDATED COMPANY acquire a very extensive and valuable property, comprising 16 mines, which have formed a portion of the group which have been so exceedingly successful. From these 16 mines alone silver of the value of nearly £600,000 has been produced from comparatively shallow workings, the mines still carried on by the Government having continued very rich to their present depth of 300 fathoms.

KONGSBERG CONSOLIDATED
SILVER MINES (LIMITED).

(Incorporated under the Companies Acts with Limited Liability).

CAPITAL £120,000, IN SHARES OF £1 EACH.

Payable 2s. 6d. per share with application, 2s. 6d. on allotment, and the remainder by instalments not exceeding 2s. 6d. each, nor oftener than once in two months.

If no allotment is made the deposit will be returned in full.

DIRECTORS.

WM. DUNN, Esq., Director of the Bratsberg and the Oscar Companies.

Major R. HEANE, Director of the Oscar Gold Mining Company.

J. H. MURCHISON, Esq., F.R.G.S., Chairman of the Bratsberg Copper Company, and of the Oscar Gold Mining Company.

SAMUEL YORK, Esq., Director of the Bratsberg and of the Oscar Mining Companies.

Captain J. P. DAW, Managing Director in Norway of the Oscar Company, and Manager of the Bratsberg Mines.

BANKERS.

The IMPERIAL BANK (Limited), Lothbury.

COMMISSIONER AT KONGSBERG.

MR. M. RASCH (Many years one of the MANAGERS, and now TREASURER of the GOVERNMENT MINES).

SOLICITORS.

MESSES. KERLY, SON, AND VERDEN, 14, Great Winchester Street, E.C.

SECRETARY AND OFFICES.

Mr. J. H. A. SMITH, 8, AUSTIN FRIARS, LONDON.

This company is established to acquire a very extensive and valuable property, stated to be about 3½ square miles, known as South Vinoren, or Dronningkollen, comprising 16 silver mines, originally forming a portion of the group of the famous mining undertakings in the Kongberg district, which have been so successfully carried on by the State of Norway for many years.

According to the Official Records the Government Mines (including those on Dronningkollen) have yielded 884,112 kilogrammes of fine silver, equal to 1,933,995 lbs. avoirdupois, which even at the present lower rates would be worth about £5,801,985, and the profits realised in the 50 years to the end of 1883 have been at least £1,172,743. The real profits are, however, considerably larger, as the returns are subject to a heavy annual charge for pensions and other exceptional burdens, which Mr. Rasch (the treasurer) states to be 25 or 30 per cent. of the net profits; and at the same time the operations are carried on upon a limited scale, and in a somewhat primitive manner.

In the year 1854 Mr. Rasch says it was resolved that 4,000,000 kroners of silver should be extracted beyond the usual quantity, and that the proceeds should be lent to such communes as were in need of funds, and this order was carried out. Again, out of the annual expenditure, he says that no less than 65,075 kroners (£3615) goes to the Municipal Council of Kongberg (£1245), pensions (£2205) and mining school, &c. (£165); 84 men and 120 women and children receive pensions. Only five days a week are devoted to the works.

With this prospectus is given a full description of the history and prospects of the Dronningkollen Mines by Mr. Rasch (long a manager and now treasurer of the Government Mines), his statements being verified and confirmed by Mr. Langberg (Master of the Royal Mint), and also a report by Captain Plummer, the well-known English authority.

The property is situated about 6½ hours' journey from Christiania, and, therefore, only about three days from England.

Mr. RASCH remarks that the geological characteristics of these mines very much resemble those which the State has continued to work, and that though in the old period the former were not worked much more than a third of the time of the latter, they gave actually a greater output of silver; and he, therefore, predicts for the former as brilliant a success as has attended the mines that have been continued by the Government. He further points out that the profits of the Kongberg Consolidated Mines would not be subject to the heavy charges for pensions and Municipal payments which the State Mines have to bear.

The following are the names of the principal mines which the company will acquire:—

UBRIKKA (2).	KRONPRINDE FREDRIK I. NORGE.
JULIANETRAA.	PRINSESSE MARIA.
JULIANE MARIE.	LOVISA.
NORSKE LOVE.	RAVNAAS.
CHRISTIANUS SEXTUS.	GLUCKAUF (2).
DRONNING SOPHIE MAGDALENA.	

Capt. DAW (Manager of the Bratsberg Mines), who has examined the property at surface and in the adit levels, writes:—

"Some time ago the Storting agreed to grant this part of the Kongberg Mines to capitalists in Norway or to foreigners. Shortly after this law was passed a company was formed by Norwegian gentlemen, with a capital of only a few thousand kroners (Kr. 1000 = £55 11s. 1d.), which was soon spent in building houses and erecting stamps, with a little dressing machinery. They started to drive a level from Christianus Sextus to Norske Love. Had they continued this level, and not put up a rise in the middle of the drivage, they would have come under the Norske Love Mine full 20 fms. If the mines are worked this level must be driven."

"I am informed by the Master of the Royal Mint that this Norske Love is one of the richest of the mines."

"When their few thousand kroners were exhausted they had to suspend operations; but they have done much work for a new company."

"It appeared to me that nearly all the lode (in the adit levels) was taken away up to and nearly to surface; and what surprised me more than anything else was that there are not much rubbish heaps for such extensive workings, plainly showing that nearly all (the lodes) has been carted away to be smelted."

"According to the official records of the Ravnaas Mine it yielded 3 4-10 lbs. of pure silver to the square metre, there being 6½ metres to the cubic fathom, which would give in money value over £35 per fathom. This mine, according to my opinion, could soon be unwatered by a cross-cut adit from the side of the mountain, and at very little cost."

"I was informed by the Master of the Mint that many of the other mines were equally rich; they only wanted capital to open them up."

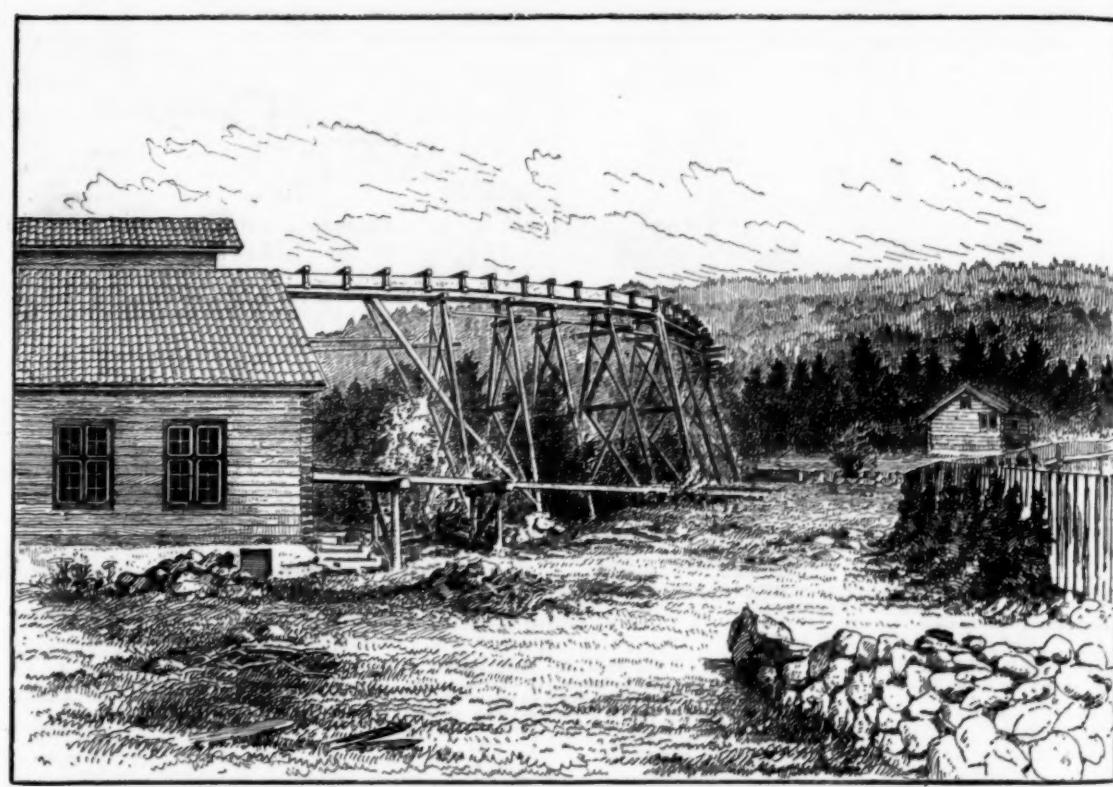
Capt. PLUMMER states that with the exception of a piece of ground at present reserved by the State, the Dronningkollen property immediately adjoins the Government mines, and the following extracts from his report will show his opinion of its value and prospects:—

"At Kongberg I went to the bottom of the State Silver Mines, and from the knowledge I gained, together with the information given to me by the officials there, coupled with the documents you procured for me, I am able to give the following information:—

"After an examination of the working plans and sections, I went to the bottom of one of the principal State Mines, and thus made



AGENT'S HOUSE.



LAUNDERS CONVEYING WATER TO STAMPS



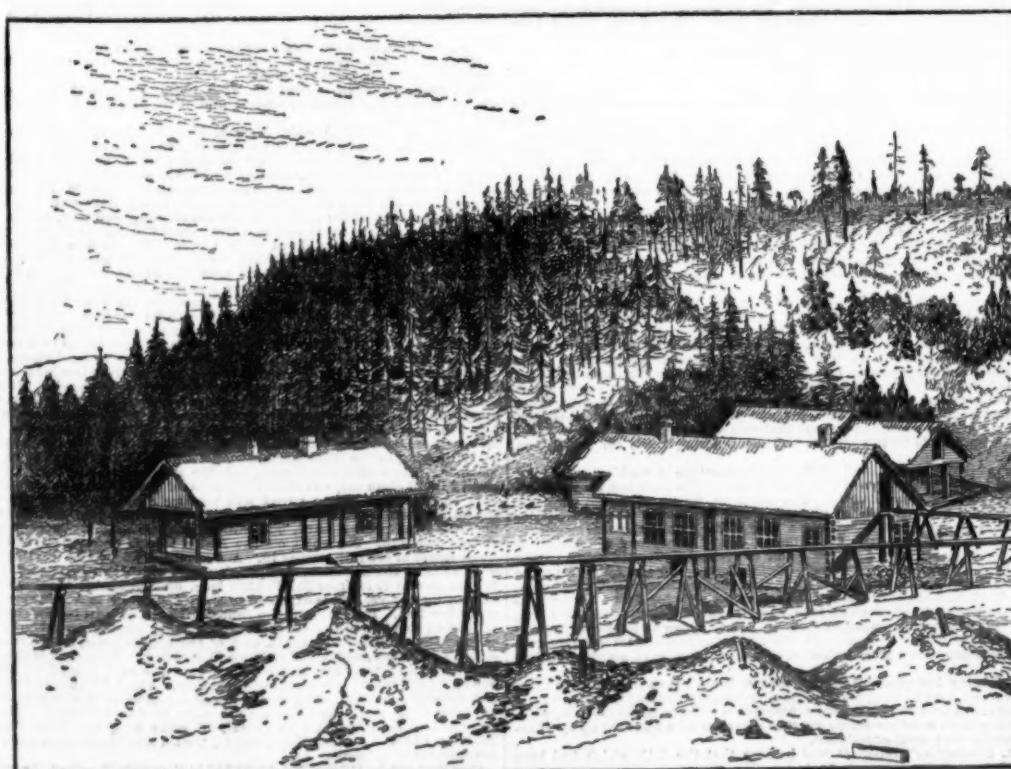
OFFICE AND LABORATORY.



HOUSES CONTAINING WATER-WHEEL, STAMPS, AND GENERAL DRESSING MACHINERY.



DRESSING SHEDS, SMITHY, &c., AT MOUTH OF CROSS-CUT.



WORKMEN'S COTTAGES.

DRESSING FLOORS AT MOUTH OF CROSS-CUT

myself acquainted with the character of the rocks, the lodes, and general appearance of the mines, for comparison with the Dronning-skoll mines.

"In the bottom of the mine I saw exceedingly rich stone. There were lumps as large as a man could lift, estimated to contain £160 worth of pure silver. I also saw pieces of pure silver of about 2 lbs. weight which were taken from 'vughs' or fissures in the vein. These workings were in a direct line with the properties forming the subject of my report.

"The Dronning-skoll Mining Territory has an area of about 3½ square miles, and comprises within its boundaries the greater part of the mines and openings which have been worked by the Government in the Southern Vinoren Silver Field.

"I have formed my favourable opinion on what I saw here and at the neighbouring State Mines, and have based my calculations on the accounts and certificates which you procured for me from Mr. Rasch, formerly manager of one of the Government mines, and now cashier at the Royal Mint at Kongsberg. The accuracy of Mr. Rasch's statement is certified by Mr. Langberg, the Mint Master, who was educated as a mining engineer, and who having made special researches in the national archives of the silver works is considered the highest authority on the matter."

"With proper supervision and efficient machinery the mines should be worked at much less cost than the State Mines, and as Mr. Rasch explains, the new company would also be exempt from the tax of 11 per cent. for pensions, &c., now charged against the Government Mines, and I, therefore, think that 1 kilo. would be ample to cover working expenses. I will, however, conduct my calculations on the Government basis—that the expenses will equal 75 per cent. of the returns, and take the latter according to the statements furnished, an average of about 2 kilos. per square metre, or (say) 32 lbs. fine silver per cubic fathom. Thus one-fourth will be the profits—equal 8 lbs. fine silver per cubic fathom at £3 per pound, or £24 sterling as clear profits; it will readily be seen that the amount of profits will be limited by the number of fathoms of vein extracted.

"These calculations are based on the figures contained in the documents you procured for me, and as the mines were all under water (below the adit) at the time of my visit, I had no means of verifying the correctness by actual inspection underground. I saw, however, at the bottom of the State Mines a rich silver lode, and judging from this, as well as from the surface appearances, I am persuaded in my own mind it is a very desirable mining venture.

"To open up and properly develop the above-named mines a fair allowance of time and capital must be made, but at the Ravnasæ Mine returns can be almost immediately obtained, which would yield a good profit while the larger operations were in progress. This (Ravnasæ) Mine is about 36 fms. deep, and from 650 square metres of lode 1000 kilos. of silver were obtained, an average of 1·55 kilos. per square metre, or (say) £35 per cubic fathom. The former workers were driven out by water which they had not sufficient and proper appliances to cope with. There is now an engine on another part of the set which could be fixed at Ravnasæ, and in a few months' time the works necessary could be completed, as before estimated, at a cost of (say) £2000.

"Labour is abundant. Good miners can be got at a reasonable rate, and the general expenses would not be higher than the ordinary English mine cost. In the valleys below the mines there is said to be ample power to drive powerful hydraulic engines, and I have therefore recommended a turbine for giving motive power and engines driven by compressed air, which will not only save the cost of fuel for steam, but will also afford an efficient and economical method of ventilation.

"Wood is plentiful, and can be cheaply obtained for fuel and mining purposes.

"The mines are within three days' journey of England. From Christiania to Kongsberg there is railway communication, passing on the route, at a distance of 30 miles from Kongsberg, the important shipping port of Drammen. From Kongsberg to the foot of the mountain on which the mines are situated there is a good road; the mountain road will require some repairs, but the cost of these is included in my estimate.

"Carefully considering the prospects of the Dronning-skoll property there appears to be the very minimum of speculation. The mines themselves form a portion of the group which have been in successful operation for nearly 250 years.

"I have before stated in the Government mines veins appearing to be the same in character as those proposed to be operated upon in the Dronning-skoll mines may be seen, and their productiveness at a depth of 300 fms. guarantees that they are continuous in depth, and offer scope for permanent and profitable exploration.

"A further proof of the profitable nature of the ground is to be found in the fact that the workings have proved remunerative notwithstanding the heavy pensions and numerous disadvantages attendant on State industrial works, and the exceedingly rude manner in which the operations were formerly conducted. I am informed all winding and hauling was done by horse whims and water, and ore was raised to surface in this slow and expensive manner, while underground fire was employed for breaking the rock. Add to this the restrictions which were imposed on the output from the State Mines, and it will be seen what immense advantages a new property would have over the old workers.

Lastly, quoting again from Mr. Rasch's notes, in which he clearly demonstrates the lodes in most of these mines to have yielded 2 kilos. of fine silver per square metre in the past working, and assuming the lode to continue as rich in depth they must prove to be fabulously rich mines, and it will appear from Mr. Rasch's figures, taking 2 kilos. of fine silver per square metre, the profits will practically only be limited by the amount of capital devoted to opening up the mines, and adding to the plant from time to time as may be required, and if the work is carried out as I recommend, as far as it is possible to judge in mining matters, I am of opinion that the results cannot but be highly satisfactory and remunerative."

The vendor has handed to the directors certificates of assays of stones and samples stated to be from some of the lodes, signed by Messrs. Johnson and Matthey, which show the following remarkable results:—

	Gold—Ounces.	Silver—Ounces.
No. 1.....	1	12,680
No. 2.....	0·150	3,650
No. 3.....	Traces	1,080

Besides the very high percentage of silver, these assays disclose the important fact of the existence of gold to a valuable extent, and this may lead to further discoveries that would greatly enhance the value of the mines.

It will be observed that Capt. Plummer estimates the capital required for supplying adequate machinery and opening the mines properly at £41,500, which includes a reserve of £15,000; but the sum proposed to be raised will provide upwards of £60,000.

No positive statement can be given of the amount of profits to be made; but taking the official records of the large quantity of silver produced from the ground already worked as proving the richness of the lodes—considering the strong and favourable views expressed by the best informed and most competent persons—and bearing in mind the highly remunerative results for many years past of the State Mines of an exactly similar character on the adjoining property, notwithstanding the limited scale on which they are carried on, and the special burdens to which they are subject—Capt. Plummer is amply justified in believing that there is "the very minimum of speculation," and that the lodes, having in the immediate locality continued so rich and profitable to the greatest depth yet reached (300 fms.), "offer scope for permanent and profitable exploration" in the Kongsberg Consolidated Company's property.

The object will be to take in hand, first, several of the mines which can be brought most quickly into a profitable state, and then proceed with others. It might also be desirable hereafter to dispose of some of the rest on terms that would give an advantage to the company.

It may be anticipated that even the first year will give a profit, and the directors confidently believe, with Capt. Plummer, that "the results cannot but be highly satisfactory and remunerative," especially with the improved and efficient machinery that will be adopted.

Two important facts will not escape notice—that Mr. Rasch, one of the principal officials of the Government Mines, has consented to give his valuable assistance to this company; and, secondly, that the properties are within so near and easy a distance of England.

Many of the statements set forth in this prospectus cannot possibly be within the personal knowledge of the directors, but they have taken the greatest care to verify them by reference to official and other authorities on which they can place reliance, and they believe such statements are entirely correct.

The purchase money will be £55,000, of which £35,000 will be taken in paid-up shares. The balance of £20,000 has to be paid in cash by instalments spread over 12 months.

It will be observed that Mr. John Henry Murchison, the vendor, is a director of the company.

The only agreements entered into are one dated April 21, 1884, between M. J. Frog and Anton Bonnen of the one part, and John Henry Murchison of the other part. The other dated May 31, 1884, between the said John Henry Murchison of the one part, and John Henry Augustus Smith as trustee for the company of the other part, which said agreements, together with the Articles of Association, can be inspected at the company's office, and applicants for shares will be taken to have notice of the contents thereof.

Application will in due course be made to the committee of the Stock Exchange for an official quotation of the shares.

Prospectuses, with copies of Mr. Rasch's and Capt. Plummer's reports, and views of the buildings, surface plant, &c., can be obtained at the offices, 8, Austin Friars, London, E.C.; and also at the Imperial Bank (Limited), Lothbury, E.C., and their branches, Westminster Chambers, Victoria Street, S.W., and Fulham Road, S.W.

was completed on April 28. Some of the men now working in the stopes contemplate leaving shortly, consequently the stope will not be reset until a suitable party of men are available. Stope now being wrought by five men, worth 2½ tons 25 per cent. ore per cubic fathom.—**50 North:** Stope south of diagonal winze has been set to four men at 5½ lbs. (full width of lode). The lode averages about 10 ft. wide, 2 tons 25 per cent. ore per cubic fathom. From the run of ground in the level above and below, we calculate some good bunches of ore will be met with in this stock of ground. In the stope in bottom of 50 south the contract is not out; worth 2 tons 25 per cent. ore per cubic fathom.—**Saltia Well:** Having bored 60 ft., and met with no increase of water, we calculate that we have drained all springs level with bottom of well. We have now laid pipes ready for turning storm water into the well, which should replenish the springs, in addition to giving an accumulation in the shaft. Machinery is in fair working order. Estimated quantity of ore dressed for April (four weeks) 109 tons 25 per cent. ore. Dispatched to Parachilna 134 tons 17 cwt.

DENVER GOLD.—Frank S. Craven, May 31: 800 West, North Vein: Drift is 31 ft. east from cross-cut, carries 2 ft. of pay ore, 1 ft. being better than average. A new rise at 320 ft. east of cross-cut is up 5 ft., and shows 3 ft. of good ore all around. The stopes in this lift remain about the same. Crevices are small but fairly good; 100 tons mill ore last week yielded 44½ ozs. gold. Very little smelting ore is now found in this ground.—**300 West, North Vein:** West drift from cross-cut is in 125 ft. The crevices are only 1 ft. wide, and does not look so well as it did. East drift is in 75 ft. It carries 18 in. fair grade mill ore; 12 ft. stope over this drift shows 2½ ft. of good mill ore. The west stope at top of winze is stopped for the present. The east stope carries 2 ft. low grade ore; 45 tons mill ore last week yielded 23½ ozs. gold.—**900 West, Main Vein:** 3 ft. pay along junction, where two men are working; 51 tons mill ore are in mill, and several tons smelting ore have been shipped for sale.—**1350 West, Main Vein:** Drift is in 127 ft. from shaft and carries 14 in. of good ore, considerable being smelting ore. The four 12 ft. stopes from winze show a smaller crevice generally, but are still fairly good; 51 tons mill ore last week yielded 25 ozs. gold. Total milling last week (8 days) amounted to 196 tons ore and 93 ozs. gold. Considerable smelting ore has been shipped for sale.

EBERHARDT.—F. Drake, May 24: Drift No. 2 from 900 ft. west advanced on main level 4 ft.; total, 575 ft. This driving is along a seam of ledge material that apparently ought to be showing better. The rock this week has been unusually hard, otherwise there is no change. Incline rise advanced 13 ft., making total 75 ft. No special developments, but the good amount of quartz continues. From a considerable part of the rock I can find assays of silver, though as yet too low to be of much value. But still, if it only leads to any good amount of fair grade milling ore even the present showing will not have been in vain. Our free water season cannot be otherwise than a good one.

JAVALI.—G. E. Chambers, May 5: You have heard the new turbine has so far given satisfaction. We were able to run 10 stamps with it alone up to the 10th of last month, but after that the water supply fell off to below 5 stamps; I therefore, disconnected, and have worked the engine alone since Easter. As I told you originally, during the months of April and May I had very little hope of deriving much, if any, benefit from the turbine. The water is too much reduced, and from this small supply we have to take for the engine and reduction, which is almost equal in quantity to the power of five stamps. My hopes are for not having to stop stamps, or use the engine during the wet season—that is, from June to March—which has so often happened with the old turbine, and this is the great advantage which will be derived from the change. The following is my report of the past month's working, which, as I anticipated, informed you, was considerably retarded by Easter holidays, which, being at the commencement and close to pay-day, caused nearly half the month to be lost.

Mine: The level in sinking No. 1 was continued 8 varas to the west, and the plot for tipping quartz under the shaft completed. The level in sinking the No. 2 was driven 10 varas to the east; here the plot for filling was also completed, and I am now putting down a tram. In the level to the west of same sinking the rise progressed 12 varas; 9 varas are wanting to reach Pollock's tunnel, and then I shall commence stoping. A water drain from the new shaft was made. The cutting to the south manto, from Seemann's shaft, was completed. Nispero stops No. 1 yielded 193 tons; Nispero stops No. 2, 48 tons; Nispero No. 3, 271 tons; and Nispero No. 4, 27 tons. From new shaft surface stops 196 tons were extracted, and from Seemann's surface stop 254 tons. No. 1 sinking yielded 26 tons, and No. 2, 88 tons.

Esperanza.—The level was driven 5½ varas. The shaft to surface was completed, and a tram laid in connection with the tram of Pim's tunnel; this will greatly facilitate the bringing of quartz to the stamps and economise labour. Mills: La F6: 20 stamps worked 18 1/2-24 days, crushing 762 tons of quartz, which yield led 23½ ozs. of gold, making an average of 6 dwt., 1½ grs. per ton.—La Esperanza: Up to the 9th we were able to work eight stamps, and from them only four, and ultimately three stamps; upon an average five stamps worked 22 20-24 days, crushing 210 tons of quartz, which yielded 44½ ozs. of gold, making an average of 4 dwt., 5½ grs. per ton. I shall now stop for repairs, which I wish to hasten, having hopes of getting rain towards the latter part of this month.—La Cardad: From the 15th only one arrastré worked with a complement of stones, the other could only bear two rocks instead of four. The result in gold was 22½ ozs. from 18½ days' grinding.

The total remittance consists of 302½ ozs. of gold, and the total average yield of the quartz was 5 dwt., 5½ grs. per ton. I also send 1046½ ozs. of old smelted copper plates, containing a small proportion of gold. The expenditure was 78½; the remittance is valued at 75½.—**New Stamps:** I have now the timber here, and shall progress as rapidly as possible in the erection of the other four stamps. Although the present remittance is small in actual quantity, I feel sure you will agree with me in considering it satisfactory. If we can only keep the average yield to between 5 and 6 dwt., per ton our prospects for the coming wet season are very good indeed. This month I expect to send you a better remittance.

Lake Superior Native Copper.—Capt. Williams, May 24: No. 2 shaft sunk 7 ft. At this point the lode is looking very promising, carrying good walls. No. 3 shaft sunk 4 ft. in compact trap rock. No. 2 level, south of No. 2 shaft, driven 6 ft., still producing good copper. No. 3 level, south of No. 2 shaft, driven 9 ft. Not much change; lode looking very promising. Cross-cut east of No. 1 level south 3 ft.; still in compact grey trap. There is little change to note underground. At the No. 1 shaft we have completed our Cornish pump to No. 2 level from bottom of shaft, and shall commence pumping on Monday (May 26). At the surface we are making good progress in getting the Collom's jigs in place, and the carpenters are getting the classifier well advanced. This will be ready in good time for the jigs. All the machinery is running well.

Mysore Gold.—B. D. Plummer, May 34: To-day I have nothing new to inform you. The stamps as usual continue to work well, and the Europeans are in good health. (Note.—The mining reports will now come fortnightly.)

New Potosí.—Telegram: 226 tons of quartz milled: 371 to 325 ozs. of gold on hand; 25 stamps running; eight days' full work; 125 to 150 tons of quartz on dunn. Works interrupted by heavy rains, but are now resumed.

Pitangui Gold.—T. S. Treloar, May 17: The produce for April from the treatment of 163 tons of mineral raised during the month was 1364 ozs. of gold (or 8½ oits. per ton), worth at \$4. 6d. per oit. 579. 14s. The estimated cost at Exchange, 2½ d., was 445. 15s. 6d., leaving an estimated profit for the month of 132. 15s. 6d. There is no change in the mine calling for notice.

Poit Phillip and Colonial Gold.—R. Bates, April 17: Report of the progressive work done in the mine during the last month.—No. 13, or 1190 Feet Level, Western Lode: The drive going north of the cross-cut has been extended a further distance of 45 ft., total 189 ft., the vein is still small, but is making more water. Have commenced a rise near the present end of drive; ground tight. No. 11, or 990 Feet Level, West side of Shaft, Western Lode: No. 1 winze is down 85 ft., the tributaries have stopped sinking for the present; stone paid at this depth. In No. 2 winze the tributaries are still driving and stoping in payable stone. No. 3 winze has been sunk a further depth of 7 ft., present depth 9 ft.; lode looking very well, gold frequently seen.—East side of the Shaft, Old Man Lode: The drive going south of the cross-cut is in a distance of 98 ft., or 617 ft. from the main shaft, and has cut the solid rock, which is 6 ft. wide; about 5 ft. on the east side looks payable, and a little gold has been seen in the stone.—No. 10, or 990 Feet Level, Old Man Lode: The drive going south of the main north cross-cut is now in a distance of 215 ft. into the Guiton ground, width of lode 2 ft., 6 in., stone payable, ground very hard. The tributaries are putting up a rise to communicate with their winze from the level above, which, when completed, will very greatly improve the ventilation at this level.—No. 4, or 374 Feet Level, Robinson's Lode: The drive going north of the cross-cut is in a distance of 70 ft., and now in quartz payable yet, but expect an improvement shortly.—South Shaft: The tributaries on Robinson's lode are opening up the ground, and will be crushing shortly. All the underground works are in good order.

May 5: Total quartz crushed for the month ending April 16, 1479 tons; total gold obtained, 444 ozs. 5 dwt.; average per ton, 5 dwt., 22 grs. Receipts (including 631. 15s. 1d. obtained from tributaries), 1241. 16s. 4d. Payments (including 208. paid for firewood), 1139. 16s. 5d. Profit, 1014. 15s. 1d. Balance carried forward to next month's account, 597. 14s. 5d.

Ruby and Dunderberg Consolidated.—May 25: Dunderberg: There are 22 tributaries at work. There is a slight improvement in the stops above the 500 ft. level. Have shipped 62 tons tribute ore this week.—Home Ticket: The winze at the bottom of the fourth level is being sunk in a large body of iron and low grade ore containing small bunches of good ore, which is certainly a good indication for ore in paying quantities; progress this week 6 ft.; total, 30 ft. below the fourth level. The tributaries between the first and second levels are extracting some fair grade ore. There are four tributaries and two contractors at work; 4 tons quartz ore shipped this week.—Lord Byron: The drift to connect with the cave has been advanced 5 ft. during the week; total, 34 ft. from the main tunnel. We expect to make the connection during the coming week. The orebody 30 ft. above the tunnel level is improving, its present size is from 2 to 3 ft. wide, and from 8 to 10 ft. in length; have shipped 32 tons ore this week. Grigg and Co. shipped their ore from the Valentine shaft, and have quit work. Will endeavour to get other tributaries to take their place.

Telegram, June 17: 25 tons tribute ore shipped, and 108 tons tribute ore melted producing to company \$502.

Richmond Consolidated.—Telegram, June 17: Week's run (one furnace) \$20,000 from 443 tons of ore; refinery \$20,000.

Santa Barbara Gold.—T. S. Treloar, May 17: The mineral treated at the smelting-floors during April was 773 tons, of which 183 tons were rejected, and 600 tons (raised from the mine), together with 24 tons stone from the refuse heap at surface, in all 624 tons stamped. The total produce was 1121 oits. of gold (or equivalent to 1786 oits. per ton), worth at \$4. 6d. per oit. 476. 9s. 6d., and the estimated working cost for the month at exchange 2½ d. being 889. 15s. 2d., leaves an estimated excess of expenditure of 418. 8s. 8d. on the mine working account during April. In addition to the above mine working cost, the sum of 141. 15s. 9d. was estimated as having been expended on capital account during April in respect of the construction of the new hauling machinery and miners tool-house, &c. In the early part of the month the output of mineral was interrupted while work was being executed preparatory to hauling with the new machinery. The lode in the bottom of the mine north, and also in the end advancing south has improved in appearance since last commented upon, but the output is limited owing to the position of our works at present not being favourable, seeing that we are driving and sinking preparatory to opening out new stopes, and to facilitate the discharge of the mineral.

St. John Del Rey.—Teleg from Morro Velho, dated Rio de Janeiro, June 20: Produce 12 days (first division of June) 7750 oits., value 3032.; yield 4½ oits. per ton.—Cuiaba: Profit.

Victoria Gold.—R. Larchin, May 12: I had hoped to advise gold bar by this mail, and, as I hinted last month, provide for all drifts. We have had to stop for water, and also for alterations, longer than I expected, and I have

not been able to get the clean up in time. Just at this moment there is some little stir, owing to change of Government to get all mine dues paid up close, and we find ourselves called on for our year's dues. I have nothing to add as to the mines. I have said there is nothing in this rich country to compare with them; the trials in the gravel give good results, and operations for sluicing, in addition to the stamps, will be started at once. Some of our people are writing their friends in England to purchase shares. Health of all employed is good; start for home in a day or two.

—J. Christopher Danby, May 12: Mr. Larchin is at the mines, and is much pleased. We shall have a bar or two of gold ready in a few days. The mill has been delayed, owing to the men not being accustomed to the pneumatics, and a little scarcity of water. I am glad to say we have plenty now of the latter.

Victoria (London).—May 3: Total quartz crushed for the month ending April 26, 2936 tons; total gold obtained, 516 ozs. 6 grs.; average per ton, 4 dwt. 18 grs. Receipts, 1252. 8s. 2d.; four weeks' mine costs, 1189. 6s. 11d.; profit, 62. 19s. 3d.

YORK PENINSULA.—Capt. Anthony, May 6: Kurilla Lode: The 80, east of Hall's shaft, is driving by four men at 9s. 10d. per fathom. This level has passed through the rich bunch of ore recently reported a total length of 15 fms., but has not yet reached the ore gone down in the 67. The lode is now small, and worth about 1 ton 16 per cent. ore per fathom. Four men are engaged stoping in the back of this drive in the trench, the lode being worth 8 tons 16 per cent. ore per fathom. Two men are still engaged taking out the ore, west of the big lode, as reported last month. In the 67 eight men are stoping a lode averaging 4 tons per fathom, and four men are stoping on the south branch, 12 men are stoping, as reported last month, the lode averaging 5 tons 16 per cent. ore per fathom. At the 40 four men are engaged taking out a piece of hard ground in order to reach the north wall of the lode preparatory to driving on the lode. Four men are still sinking the winze below this level, the lode being worth 4 tons 16 per cent. ore per fathom. Four men are driving the 35 on the south branch, east of No. 2 hauling shaft, lode being worth 3 tons 16 per cent. ore per fathom. Four men are sinking a winze below this level, the lode averaging 3½ tons 16 per cent. ore per fathom. Eight men are stoping the back of the 35, the lode averaging 3½ tons 16 per cent. ore per fathom. Of the 12 men who were stoping the back of the 25 last month eight have finished their stopes, leaving two stoppers in the level, and two men rising in the back of the drive, the lode averaging 3½ tons 16 per cent. ore per fathom. One man is working in this level on tribute at 9s. in 12. At the 20, on Kurilla lode, west of Gurner's shaft, in 39s., four men are stoping a lode worth 4 tons 16 per cent. ore per fathom, and eight men are stoping on Nos. 1 and 2 branches, south of Gurner's lode, averaging 4 tons 16 per cent. ore per fathom.

Morphett's Lode: The 67, east of tunnel, is driving by four men, at 12s. 10s. per fathom; the lode being worth 6 tons 16 per cent. ore per fathom. The winze sinking below the 55, east of Morphett's shaft, is holed, and four men are put to stop back of the 67, the lode where they are at work averaging 3½ tons 16 per cent. ore per fathom. In about a fortnight there will be a stop ready to be worked in the rich part of the lode, where the lode averages 6 tons 16 per cent. ore per fathom. Two men are still sinking a winze below the 55, west of Morphett's shaft, the lode being worth 2 tons 16 per cent. ore per fathom. Four men are stoping the 55 on the north branch, north of Morphett's lode, the lode being worth 3 tons 16 per cent. ore per fathom. Six men are working on tribute in the 43 and 30 levels at an average of 8s. 6d. in 12. —Ore Returns: There had been raised during April 400 tons of ore, and sold and delivered in the colony 337 tons, and shipped to England 148 tons, leaving on hand at the mine at the 30th of the month 2827 tons, averaging 14 per cent., and of which 370 tons, averaging 14½ per cent., were dressed and waiting sale or shipment.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received June 16, 1884, ex Mondego (s.), dated Morro Velho, May 19:—

GENERAL OPERATIONS.

GOLD PRODUCE FOR THE MONTH OF APRIL, 1884.—The gold extracted in the above period amounts to 15,757½ oits., equal to 1816.5833 oits. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
Morro Velho stamps	12,457.5	from 4211 =	2.958
Praia ditto	2,025.3	" 681 =	3.013
Re-treatment	14,509.8	" 4892 =	2.966
Total	15,757.5	" 4892 =	3.221

COST AND LOSS.

Produce 15,757½ oits. at 7s. 9d. per oit. £ 6,077 13 4

Cost 6,193 5 9

Loss for the month £ 115 12 5

MINE.—Mineral raised from the mine 5362 tons.

Mineral quarried per borer per diem 2·78

Average attendance of borers daily 76·96

Average attendance of natives daily 316·32

SUMP.—This has been sunk during the month 3½ ft.; this rate of sinking is less than it should have been, operations having been retarded owing to the irregular working of the borers during the month. No change to report in either stamp fore or aft.

No. 1 STOPE, SECTION 320 B.—This is now rapidly advancing towards the incident. The lode is of apparent good quality; but the results are disappointing. No change to report.

No. 2 STOPE.—This is being pushed on as fast as possible so that mineral quarried here can be hauled by the No. 2 kibble. On the north side the mineral is of a mixed nature, and as much as possible of the poor mineral on the south side is being left.

No. 3 STOPE.—This has reached the slide on the north side. The north branch has again been met with, but is smaller, and to all appearances the quality of the mineral is not as rich as formerly. The south side is being stripped down as fast as possible.

EASTERN RESERVES, SECTION 214.—Operations have been carried on here regularly during the month, and the ground has been secured as far as the force will admit. No change to report.

TRIAL SHAFT.—This has been sunk a total depth of 34 ft. 4 in., but has now been suspended, because the No. 1 stope will pass through the greater part of the shaft, and it is also dangerous for men working here, whilst the kibble is being rolled over the No. 2 stope. As soon as the No. 1 stope has passed this point sinking will be commenced again.

GOLD EXTRACTED TO DATE.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine share-dealer, Redruth (June 19), writes:—We have had a very dull market again this week, with more sellers than buyers. To-day although there is next to nothing doing Dolcoath and East Pools are a little firmer. Subjoined are the closing quotations:—Carn Brea, 2 to 2½; Cook's Kitchen, 12½ to 13½; Dolcoath, 7½ to 7½; East Pool, 41 to 42; Killifreth, 5s. to 7s. 6d.; New Kitty, 13½ to 14; North Busy, 3½ to 4; Polberro, 1½ to 2; South Condurrow, 9 to 9½; South Crofty, 3½ to 3½; South Frances, 8 to 8½; Tincroft, 3½ to 4; Trevaunance, 13½ to 2; West Bassett, 3½ to 4½; West Frances, 5 to 5½; West Kitty, 11½ to 12; West Pever, 1½ to 2½; West Polbrex, 9 to 10½; West Poldice, 9 to 9½; West Seton, 4½ to 5; West Wheal Agar, 15 to 16½; West Wheal Bassett, 3 to 3½; West Wheal Grenville, 6 to 6½; West Wheal Pever, 9 to 10½; West Wheal Seton, 4½ to 5; West Wheal Uny, 9 to 10½; West Wheal Coates, 5 to 6½.

—Messrs. ABBOTT and WICKETT, stock and share brokers, Redruth (June 19), write:—The market has been quiet this week with but little business doing, today however a better feeling has been prevalent, and prices are generally higher. A rise in the tin standards is expected to-morrow. Closing quotations herewith:—Camborne Mine, ½ to ¾; Carn Brea, 2½ to 3; Cook's Kitchen, 13 to 13½; Dolcoath, 7½ to 7½; East Pool, 41½ to 41½; Killifreth, 5½ to 6½; New Cooke's Kitchen, 1 to 1½; New Kitty, 1 to 1½; Polberro, 1½ to 2; South Condurrow, 9 to 9½; South Crofty, 3 to 4; South Wheal Frances, 8½ to 9½; Tincroft, 3 to 3½; West Bassett, 4 to 4½; West Frances, 15 to 15½; West Seton, 4½ to 5; West Wheal Agar, 15 to 16½; Wheal Bassett, 3½ to 3½; Wheal Grenville, 6 to 6½; Wheal Pever, 9 to 10½; Wheal Seton, 4½ to 5; Wheal Uny, 9 to 10½.

—Mr. M. W. BAWDEN, Liskeard (June 19), writes:—The mining market continues dull, and assumes a general quietude, with few transactions, in which sellers have to submit to a further reduction in order to effect business. At Wheal Grenville Mine meeting on Wednesday a dividend of 2s. 6d. per share was made. Subjoined are the closing quotations:—Bedford United, 1½ to 1½; Carn Brea, 2 to 2½; Cook's Kitchen, 12 to 12½; Dolcoath, 9½ to 70; Devon Consols, 2½ to 3; East Caradon, 3½ to 4½; East Pool, 39 to 39½; Frontrinty, 2s. to 3s.; Guineas Coast (A), 1s. to 2s.; Javall, 2s. to 3s.; Kiblinoor (B), 2s. to 3s.; Kapanga, 2s. 6d. to 3s. 6d.; Lisbon-Berlyn, 12s. 6d. to 15s.; Pernick, 1s.; Schwab Gully, 7½; Tecoma, 1s. 3d.; Taquash, 1s. to 2s.; and West Callao, 4s. to 5s.

In shares of home mines business has been quiet. Anderton are at 10s. to 15s.; Carn Camborne, 6s. to 8s.; Carnarvon, 1s. 2s. to 4s.; Devon Friendship, 1s. to 1s. 6d.; Eton, 27s. 6d. to 32s. 6d.; East Blue Hills, 3s. 6d.; East Wheal Rose, 8s. 9d. to 11s. 3d.; Frongoch, 6s. to 8s.; Goginan, 1s. to 2s.; Gorsedd and Merlin, 12s. 6d.; Gunnislake (Clitters), 10s. to 15s.; Killifreth, 6s. to 8s.; Mount Bay, 3s. to 5s.; Mostyn Consols, 15s. to 25s.; New Terra, 7s. 6d. to 10s.; Pedn-an-drea, 1s. 3d.; Phoenix United, 40s. to 45s.; Parys, 1s. to 1s. 6d.; Porridge, 6s.; South Crofty, 1s.; Trebartha Lemarne, 1s. 6d.; Tresavae, 5s. to 7s.; Tankerville, 6d.; West Bassett, 5s.; West Holway, 2s. 6d. to 5s.; West Devon, 2s.; West Phoenix, 3s. to 5s.; Wheal Coates, 3s. 9d.; Wheal Bassett, 70s.; Wheal Crebore, 25s. to 30s.; Wheal Jane, 2s. 6d. to 5s.; Wheal Uny, 5d. and Ystwith, 6d. to 8s.

In shares of gold and silver mines prices are steady. Montanas are 42s. 6d. to 45s.; Richmonds and United Mexicans unaltered. Callao Bis expected to improve. Antioquia are 2s. 9d.; Argentia Silver, 10s. to 15s.; African Gold Coast Syndicate, 80s. to 85s.; Balkis, 20s. to 30s.; California, 12s. to 18s.; Frontino, 2s. to 3s.; Guineas Coast (A), 1s. to 2s.; Javall, 2s. to 3s.; Kiblinoor (B), 2s. to 3s.; Kapanga, 2s. 6d. to 3s. 6d.; Lisbon-Berlyn, 12s. 6d. to 15s.; Pernick, 1s.; Schwab Gully, 7½; Tecoma, 1s. 3d.; Taquash, 1s. to 2s.; and West Callao, 4s. to 5s.

In shares of miscellaneous companies prices are steady. Nobel's declined from 15s. to 13s., but are now about 14s. Elmore and Company Debentures offered at 47; Home Mines Trust, 8s. to 10s.; Lawes' Chemicals, 4½ to 5; and Odams' Manure, 9 to 10.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street (June 18), write:—Railways show some improvement since last report. Brighton Deferred, however, is an exception, the price having declined. Grand Trunk stocks are better, and several American securities have rallied from the depression. Prairie Cattle shares had a sharp advance after the meeting. Mining shares, with the exception of Arizona, have been sparingly dealt in. Nobel's Explosives have fluctuated a good deal. Since Wednesday last week Caledonian has risen from 9s. to 9½, Edinburgh and Glasgow from 33s. to 34s. Bank of Scotland has advanced from 317 to 318. Caledonian from 4½ to 4½. British Linen has declined from 312 to 31½. Commercial from 54s. to 54. National from 31½ to 31½. Union from 21 to 23½. Scottish-American Mortgages have risen from 57s. 6d. to 62s. Prairie Cattle shares from 5½ to 6½, the Second Issue from 5½ to 6½, the Third from 5½ to 7½. Western Land and Cattle from 6 to 6½. Canada North-West Land have fallen from 42s. 6d. to 40s. 3d. Hudson's Bay from 23½ to 23¾. Aransas have gone from 15s. 3d. to 18s. Canadian Copper from 2s. 6d. to 3s. 3d. Lochore and Capelidre from 6 to 8s. Lanark Oil have changed from 6 to 5½. Midlothian from 9s. to 9½.

IRISH MINING AND MISCELLANEOUS COMPANIES SHARE MARKET.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (June 19), write:—Great Southern and Western stock have changed hands to-day at 11s. and Wicklows at 5½. No alteration in Great Northerns or Midlands. Cork and Bandon stock remain 82½ to 83; and Bantry Extension shares at 10½ to 10½. Bank of Ireland firm, at 327. Hibernians advanced to 23, and Nationals were dealt in at 24 15-16ths to 25. Provincials changed hands at 31. Nothing done in Munsters. Alliance Gas remain 19s., and Dublin Trams steady at 8 7-16ths. Cork Steam Packets, 11s.; Cork Steamships offered at 16s. T. Lyons and Co. (47 paid shares), 5; ditto (fully paid), 6s. Gouldings firm, at 8s. Commercial Building shares offered at 48. T. Lyons and Co. 5 per cent. Debentures wanted, at 102½, and Harbour Board Debentures at 102½.

THE COPPER TRADE.

Messrs. HARRINGTON, HORAN, and CO. (Liverpool, June 14).—Chill copper charters for second half of May were advised on May 31 as 1600 tons fine, of which 650 tons bars and ingots, with 50 tons furnace material for England, and 900 tons bars for the continent. The price of bars has since been advised as \$17 47½, and Exchange 31½d. Chill bar market has been rather inactive since our last, and only a moderate trade has been done at from 58s. 5d. to 59s. 17s. 6d. spot, and from 56s. 10s. to 55s. for three months prompt. Spot parcels are still scarce, and three months prompt lots only command a premium of 2s. 6d. per ton. We close firm at 55s. spot. English manufacturers yesterday reduced their official quotation for strong sheets from 70s. to 67s. per ton. The business in furnace material comprises—At Liverpool: 175 tons Bilbao ore (Carbonate) at 10s. 9d., and 60 tons Canadian regulus at 10s. per unit. At Swansea: Nil.—Precipitate: 145 tons English at 11s. 6d. to 11s. 7s. 6d., and 200 tons Spanish (Cueva de la Mora) at 11s. 3d. per unit. Import of Chill copper during the past fortnight 1212 tons fine, against 1111 tons fine same time last year; delivery 1138 tons fine, against 925 tons fine. Import of other copper during the past fortnight 1510 tons fine, against 1178 tons fine same time last year; delivery 1336 tons fine, against 794 tons fine. The total imports of Chill and other copper into Liverpool and Swansea since Jan. 1 have been 32,670 tons; deliveries during the same period 37,729 tons fine; for the same time last year the figures were 28,825 and 24,874 tons respectively. Arrivals here during the fortnight of West Coast 8. A. produce:—Monarch (s.) from Valparaiso, 4s.; 33 tons bars, 256 tons ingots; Otter, from Pisco, 300 tons ores; Aconcagua (s.) from Valparaiso, &c., 522 tons bars, 120 tons ingots; Arctic (s.) from Valparaiso, &c., 30 tons ores. As Swans: Nil. Stocks of copper (Chilian and Bolivian) in first and second hands likely to be available we estimate at—

Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	19,457	258	—
Swansea.....	147	2,323	3,577	—
Total	147	23,223	27,034	258

Representing about 24,365 tons fine copper, against 24,292 tons May 29; against 26,833 tons June 15, 1883; 23,758 tons June 15, 1882; 30,753 tons June 15, 1881. Stock of copper contained in other foreign ore and Spanish precipitate, 4100 tons fine, against 3672 tons June 15, 1883. Stock of Chill bars and ingots in Havre, 1476 tons fine, against 2342 tons June 15, 1883. Stock of Coro Coro Barilla in Havre, nil, against nil, June 15, 1883. Stock of copper other than Chill in Havre, 80 tons fine, against 185 tons June 15, 1883. Stock of Chili copper afloat and chartered for to date, 8890 tons fine, against 9227 tons June 15, 1883. Stock of foreign copper in London, chiefly Australian, 363 tons fine against 5100 tons June 15, 1883.

According to the Board of Trade Returns the total imports and exports into and from this country for the first five months of the following years were:—

IMPORTS.	EXPORTS.
Copper in ores	Tons. 4,204
Copper in regulus and precipitate	5,696
Hans, cakes, and ingots	11,017
In pyrites, estimated	14,034
Total	36,193
	41,343
	45,396
EXPORTS.	
English copper—wrought and unwrought	16,788
Foreign copper—wrought	4,813
Foreign copper—unwrought	4,784
Yellow metal	6,934
Total	23,245
	26,823
	30,216

From Mr. JOHN B. REYNOLDS:—The extreme quietude noticed in our last continues; in fact, the prices of various securities have had a further and general fall. The mining market has also been very quiet, with little or no disposition evinced to do business; we are, however, very happy to be able to say that in the best informed circles it is confidently predicted that we shall have a great revival of business within the next six or eight months. The arguments in favour of this view are so conclusive that we are persuaded it will be well for shareholders at the present moment to think twice before they part with any *long* *date*, dividend or other, securities. Of all the mines in Cornwall, however, there is probably not one the merits of which just now are more freely discussed than Polberro. Why this should be so we really do not know, for doubtless there are other mines quite as deserving of notice, yet we may say that it is difficult to find a property the merits of which can be more clearly proved, and its capabilities more accurately weighed. The operations are being conducted with all dispatch, and seven or nine men employed in the clearing of the Turnavore shaft, where the engine will be erected. It may be easy to criticise, but it is not easy to hide from the public facts that can be so readily proved as those concerning Polberro. It is a matter of no consequence who buys or who sells these shares, for in our opinion the tendency can only be in one direction, whatever operators may elect to do. Dolcoath continues to be one of the chief topics of conversation in mining circles. Both mine and management are praised, though it was not long ago that some spoke—as we thought at the time wrongfully—in a different strain.

WHEAL COATES.—At the meeting on the mine on Monday (Hon. Ashley Ponsonby in the chair), the accounts showed a balance of assets of 1171 gs. 7d., with no liabilities due and unpaid. The water having recently increased in the 70 on the promising copper lode, it was deemed advisable to have an independent inspection of the property, and Capt. Josiah Thomas has accordingly given a report upon the mine in which he recommends that the tutwork operations for the present may be judiciously confined to the vigorous prosecution of the drivage of the cross-cut for the purpose of intersecting the West Kitty lode, and to test that point previously to erecting more powerful machinery to deal with the water from the copper lode.

The advice of Capt. Thomas, which coincides with the views of the manager of the mine, Capt. Vivian, was unanimously adopted. The lords of Ty-Tyans have agreed to forego dues during pleasure, and it is hoped that the Duchy of Cornwall will do likewise. A full report of the meeting will be found in another column.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (June 19), writes:—During the past week there has been little business doing, owing to the absence of purchasers, and prices are generally lower. The easier tendency of the money market, however, and the slightly better accounts of trade, should assist in bringing about a recovery.

In shares of coal, iron, and steel companies the principal alteration is a decline in New Vales to about 6s. 6d., on their report showing a loss of 15,000. Chanc-

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—H. Trezise, June 17: There is no change to notice in the mine since last week's report. The lode both east and west at the 75 (McCallum's shaft) is giving out water freely, which is a good sign of an improvement. The drivage in the 62 east is by the side of the lode. In the same level west the ground is good for progress, and the lode as far can be judged, is looking very promising. The several stoves and tribute bargains throughout the mine continue to yield a fair quantity of ore.

CARMARSH.—W. G. Vivian, June 19: The lode in the 105 continuing in small branches I have placed the men to rise in the back of the level a little distance behind the end where the appearances were better. We have not yet done much at this point, but are breaking some good stones of copper, and hope to find the lode still better as we get up. In the continuation of the 105 cut south we have not intersected, but have just met with a small seam containing lodestuff and specks of yellow copper ore and tin. We trust this is a favourable indication.

CASHWELL LEAD.—J. Peart, June 14: The drift in copper hazle west end continues hard, and not much ore at present, and very little fluor-spur in the vein, mostly vein rider; is not worth more than ½ ton of lead ore per fathom. The vein in driving next to the drift forehead is 3 ft. wide, with a little clay and fluor-spur mixed with ore; is worth 1 ton of ore per fathom. The vein in the head in the above stratum going east is 6 ft. wide, composed of clay, fluor-spur, and good pieces of ore; is worth 1½ ton of ore per fathom. The drift going east in copper hazle is hard and slow to work, a little more vein and some ore, we are saving the veinstuff for house. We sold yesterday 40 tons of lead ore to the Executors of Joseph Dinning at 6s. 17s. 6d. per ton.

CWM DWYFOR AND BREYNARIAN (Brynnarian Mine).—J. Davies, June 19:

In Boundary level the lode yields a little lead and copper on the south side.

DEVON FRIENDSHIP.—F. R. W. Daw, June 19: The 42 end east and the stopes in the back of the 42 west of Bennett's engine shaft, have slightly improved in value, the end being worth full £1, and the stopes 7½. 10s. per fathom for mundic ore. The stopes in the back of the 30 west of Bennett's shaft are without change since last reported on. Gill's stops in the back of the 12 is yielding two tons copper ore per fathom. The end driving east in bottom of adit level is worth 7½. 10s. per ton. The stopes in bottom of this level is worth 8s. per ton.

DEVON GREAT CONSOLS.—Isaac Richards, June 19: Wheal Maria—North

Level: We have cleared the adit level as far as the adit shaft, and shall proceed at once to cut down the shaft to a sufficient size for future general purposes—pumping and hauling; and as soon as it is made good to the adit level sinking below will be commenced with as little delay as possible for the further prosecution of this very promising lode.—Wheal Emma: New Shaft—New South Lode: In the 205 the lode—from 3 to 4 ft. carried—continues to yield 3 tons of copper and mundic per fm.—Railway Shaft: At the Railway shaft, sinking below the 205, the ground is not at present so favourable for exploration, a quantity of quartz being mixed with the killas; the progress in sinking is, therefore, not so good as it has been. In the cross-cut south, in the 205 fathom level west, the lode has been cut, proving 4 ft. wide, composed of capel and quartz, with peach, mundic, and a little copper ore. The drivage will now again be resumed on the course of the lode. In the 165 west the lode is 1½ ft. wide, yielding small quantities of copper and mundic ores.—Watson's: In the 112, west of the engine-shaft, the lode maintains its size (5 ft. wide), and continues to yield 2 tons of copper and mundic ore per fathom. At the western shaft the work in connection with cutting plat in the 32 is proceeding satisfactorily. All the other points of operation throughout the mine are without important alteration.

DEVON GREAT UNITED.—Isaac Richards, June 19: Wheal Maria—North Lode: We have cleared the adit level as far as the adit shaft, and shall proceed at once to cut down the shaft to a sufficient size for future general purposes—pumping and hauling; and as soon as it is made good to the adit level sinking below will be commenced with as little delay as possible for the further prosecution of this very promising lode.—Wheal Emma: New Shaft—New South Lode: In the 205 the lode—from 3 to 4 ft. carried—continues to yield 3 tons of copper and mundic per fm.—Railway Shaft: At the Railway shaft, sinking below the 205, the ground is not at present so favourable for

points which we are pushing with all speed. Any change shall be at once reported.

GREAT HOLWAY.—W. T. Harris, June 19: **Roskill's Shaft:** The engine and pitwork continue in sound condition, and working admirably.—**Level Engine Shaft:** The 60 level in No. 1 pitch in back of level maintains the same value as last reported—3 tons of lead and 13 cwt. of blonde per fathom; the same remark applies to No. 2 pitch, yielding 3½ tons of lead and 1½ ton blonde per fathom. No. 3 pitch in bottom of this level is producing 12 cwt. of lead and 1½ tons of blonde per fathom, and promising for further improvement. No. 4 pitch in bottom of level west is worth 1½ ton of blonde and 5 cwt. of lead per fathom. No. 5 pitch in bottom east is worth 2 tons of blonde and 10 cwt. of lead per fathom. No. 6 pitch in back of level is worth 15 cwt. of lead and 1½ tons of blonde per fathom. No. 9 pitch in back of level is worth 15 cwt. of lead and 1½ tons of blonde per fathom. No. 10 pitch is improving, worth 15 cwt. of lead and 1½ tons of blonde per fathom.—**Bramsgill Shaft:** No. 1 pitch in bottom of 60 level east is producing 10 cwt. of lead and 1 ton of blonde per fathom. No. 2 pitch in back is yielding 15 cwt. of lead and 1½ ton of blonde per fathom. No. 3 pitch in back has slightly improved, and is more promising, worth 12 cwt. of lead and 1½ ton of blonde per fathom.—**Office Shaft:** The 60 level west pitch in back is yielding 12 cwt. of lead and 1½ ton of blonde per fathom. Our last parcel of lead realised £1. 14s. 6d., and to-morrow we sell 45 tons of blonde.

GREAT LAXEY.—W. H. Rose, June 19: The bright point in the deep mine is still the 547 end north. Although there is not a large or very rich lode there, it has a very encouraging appearance, and should it continue for any considerable length, as well as further improve, it will change the aspect of things at this end of the mine materially. The present value is 15½ per fathom.

Of the stope above the 145 north is worked to dead ground, and I have removed the men to some ore in the level road a little further north. The other stope continues to be worth 25½ per fathom.—**Dumbell's:** The 243 end north is not yet fully up to the line of the ore ground in the levels above. The lode is now forming into two divisions, and a little to the north of this split, and upon the footwall branch, the ore occurs. We shall, therefore, direct the driving accordingly. The 230 end north is worth 25½ per fathom. We have resumed driving the 215 end north. The lode was poor to start with, but is now beginning to make ore again. A new stope in the sole of this level is worth 25½ per fathom. The lode in the 185 end north looks more settled, and now worth 15½ per fathom. In the 170 end the lode is smaller, and worth at present only 8½ per fathom. The whine in this level, now nearly holed to the 185, is worth 20½ per fathom. The various other stopes throughout the mine have but little changed of late. In the adit end the lode is about 1 ft. in width, chiefly composed of spar, which is sometimes brangled a little with lead and blonde. The bearing and underlay are all right, and a good discovery here would be of great importance. Our water supply is getting very short.

GREEN HURTH.—Jas. Polglase, June 12: The vein in the 44 end north is worth ½ ton per fathom. No. 1 stope, south of No. 1 winze, is worth 2 tons per fathom. No. 2 stope, south of No. 1 winze, is worth 3 tons per fathom. No. 3 stope, north of No. 1 winze, is worth 2½ tons per fathom. No. 4 stope, north of No. 2 winze, is worth 2 tons per fathom. No. 5 stope, north of No. 2 winze, is worth 2 tons per fathom. No. 6 stope in back of Standage level, is worth 3½ tons per fathom. The veins in the north end in trial drift is now cut through. At this point the vein became horizontal, and worth for lead, supposing the vein was in a vertical position, 2½ tons per fm. It is now taking its proper course in the bottom of the drift. I have nothing new to report in any other part of the mine. We completed the delivery of 100 tons of lead this week, and are now busy with another parcel. Dressing going on well.

HEALEYFIELD.—J. Trickeye, June 13: We are very busy at surface with the pumping arrangements, and expect to get the pump lowered into the shaft next week. The interior part of the mine looks about the same. Chalder's stope in bottom of main incline worth 25 cwt. of lead per fathom. Slack's stope in back of main horse level worth 15 cwt. of lead per fathom. Woodworth's stope on east string is worth 16 cwt. per fathom. Oilins' stope worth 14 cwt. per fm. Down's stope, north of foremost sump, worth 12 cwt. per fm. We intend starting the corner again next week.

KIT HILL GREAT CONSOLS.—T. Richards, June 19: At the tunnel level the ground continues favourable for exploration, 9 fms. 3 ft., having been driven during the past month, making the total distance 275 fms.—**North Engine-shaft:** Satisfactory progress is being made in cutting trip plat at the 100 fm. level, and every exertion is being made to get ready for sinking again below this level. In the 85 east the lode is 3 ft. wide, composed of capel and quartz, with peach and a little copper ore. The distance driven during the past month is 2 fms. 2 ft. 6 in. In the 85 west the lode is 5 ft. wide, of a very promising character, being composed of capel and quartz, with peach, blonde, mundic, and a little tin ore. The distance driven during the past month is 2 fms. 2 ft. 9 in. We have successfully started our stamps at East Kit Hill, and a parcel of tin will be got ready for sale as quickly as possible.

LEADHILLS.—Arthur Waters, June 19: Brown Mine: Gripp's adit going north of Muir's cross-cut, north of Glengonan shaft, is in a strong quartz vein, which at present is wet, but without ore to value.—George's Rous Mine: Gripp's, going north of Muir's cross-cut, shows a lode 5 ft. wide, of a very promising character.—Brown's Mine: The 100, south of Jeffrey's engine-shaft, is in a lode 5 ft. wide, carrying a branch of lead ore about 3 in. wide, and looks like improving in value shortly. No. 1 stope in this level south is worth 50 cwt. per fathom; No. 2 stope, 65 cwt. per fathom; No. 3 stope, 70 cwt. per fathom; No. 4 stope, 65 cwt. per fathom. The winze below the 85 south is worth 15 cwt. per fathom. Wilson's shaft below the 85 is down 8 fms. 1 ft. 9 in.; lode 5 ft. wide, composed of slate rock and quartz. The 85 going south of said shaft is at present without ore to value. The 85, north of Jeffrey's, is in a lode 5 ft. wide, quartz and stones of ore, and a little more wet than usual. The stope in the 85 south of Jeffrey's, is worth 35 cwt. per fathom. A stope in the back of the 70 south of the latter shaft, is worth 9 tons per fathom. The stope north of ditto is worth 4½ tons per fathom. A stope in the same level, south of main rise, is worth 30 cwt. per fathom. A stope above the 41, north of Wilson's, is worth 20 cwt. per fathom. A winze below Gripp's, south of Dobie's junction, is worth 20 cwt. per fathom. Gripp's adit, south of the above, is in a lode 5½ ft. wide, yielding good stones of lead ore.—Jeffrey's Vein: A pitch above Gripp's, west of Rank Junction, by three men, at 90s. per ton, is worth 25 cwt. per fathom.

MELLANEAR.—J. Gilbert, June 18: The 70 cross-cut north of main lode, east of Gundry's shaft, is still letting out a small stream of water, and the ground is strongly mineralised and easy for driving. In the 100 driving west of Gundry's shaft, on the main part, the lode is 3 ft. wide, yielding 2 tons of copper ore per fathom, and looking very promising. The lode in the 110 east of shaft, on the main part, is 4 ft. wide, and yielding ½ ton of copper ore per fathom, and some saving work for tin. The lode in the 110 west of shaft, on the main part, is 5 ft. wide, and yielding 1 ton of copper ore per fathom and some low quality tinstuff. In the 120 east of shaft, on the main lode, the lode is 3½ ft. wide, and yielding 1 ton of ore per fathom, and the ground is improved for driving. The lode in the 120 west of shaft, on the main lode, is 4 ft. wide, and yielding 2 tons of ore per fathom. The lode in the winze sinking in the bottom of the 30, south of Gundry's shaft, is 2½ wide, getting better defined, and composed of mundic, and rich stones of copper ore. In the rise in the back of the 120, east of Gundry's shaft, the lode is 3 ft. wide, and yielding 1½ ton of copper ore per fm. Gundry's engine shaft to sink below the 120. The lode is 5 ft. wide, and yielding 3 tons of ore per fathom.

MID-DEVON COPPER.—Jas. Neill, June 14: A Shaft: The water is 14 ft. above the bottom of the 80, and wheel making them revolutions per minute.—C Shaft: The stope in the back of cross-cut north from 50 east, worked by four men, has slightly improved in the yield of ore to 1½ ton of good quality ore per cubic fathom, chiefly black, similar to that raised from the 45. The strata still contains all the essential properties for a greater yield of ore.

MOUNTS BAY CONSOLS.—W. Argall and T. Job, June 14: We have cleared the Pressure shaft to the 20, and have to-day seen the 20 end, which is 90 fms. east of this shaft; in the end the lode is split, but both parts producing tin. It will take some little time to clear this level, and in our next report we shall be able to say more about its value. In bringing in a lobby at surface we have cut a lode over 2 ft. wide, and containing tinstuff in the back. We have four tribute pitches working at 13s. 4d. in 17s., and two at 15s. in 17s. Next week we shall sell our usual monthly parcel of tin.

NEW BROOKWOOD.—J. Browning, June 19: Good progress is being made with the sinking of the shaft; sinking by 12 men.

NEW CARADON.—T. Richards, June 18: We have a pair of wheelers clearing the bottom cross-cut north, and also a full pair of men sinking a winze east of main cross-cut in No. 1 lode, which is improving as we go down. It is now 15 in. wide, and will yield fully 1 ton of good yellow copper ore per fathom. The lode we are driving on east at the 20 is 18 in. wide, producing saving work for copper, and has at present a very promising appearance, and I have every reason to believe that when this mine is properly developed, that good results will follow.

NEW LANGFORD.—T. Gregory, June 18: The lode in the 23, east of Malach's, maintains its full size, and producing good saving work for silver-lead and blonde. There is no important change in the pitches, which are producing about the same quantity of ore as reported last week. The lode in the back of the 20, west of engine-shaft, is improving as we go west into new ground. Satisfactory progress is being made in clearing of the 10, east and west of engine-shaft, and the lode in the bottom thereof produces good silver-lead ore in places. Engine and machinery all working well.

NEW TERRAS.—Richard Ede, June 19: I am pleased to say that we have somewhat increased our water supply by sinking the engine-shaft. Still, we are pushing on with the necessary arrangements for the erection of apparatus to force up water from the river. We are now fully at work in the winze, and find the lode much larger than we anticipated. The yield of tin equals the report of Capt. Rickard. The ground in the deep adit driving west is of a very congenial character for the production of tin. There are hundreds of tons of dressing it, we shall be able to sell a large batch.

NEW WEST CARADON.—N. Richards, June 17: No. 5 lode is still large, over 3 ft. wide, and will now yield fully 1 ton of rich copper ore per fathom, a fine looking lode. This lode, west of cross-course, is also looking a little better.

N. Richards, June 18: No. 5 lode, east of the 38 cross-cut, is looking very well, being large, and yielding fully 1 ton of rich copper ore per fathom, and I expect from its present appearance that it will shortly further improve. This lode, west of cross-course, is also producing stones of ore of a rich quality. There is no particular change to notice in the cross-cut south at this level.

NORTH BLUE HILLS.—S. Bennetts, June 18: The men during the past few days have been employed in securing the tail of adit, &c., to prevent accidents of any kind.

NORTH BUSY.—J. James, June 19: The last branch intersected in cross-cut presents a good appearance, and makes a little copper ore. We intend opening a few fathoms on it as soon as cross-cut is further advanced.

NORTH GREEN HURTH.—J. Polglase, June 12: We have a very promising looking vein in the south end; one can scarcely doubt of the results. We are busy fixing air-pipes, building wheel, &c. Nothing new in the Hospital property.

NORTH PENSTRUTHAL.—Stephen Davey, Wm. Polkinghorne, June 19: Setting Report. Highbourn Shantment: A bargain to take down pent-house, divide the shaft, and fix the skip-road from the 150 to the 165 for 20t. We expect to have this work completed within another week, when a cross-cut to the lode will be put out as quickly as possible. The 150 level, to drive west, by six men, at 5½ lbs. per fathom; lode 2 ft. wide, producing a little tin.

OLD GUNNISLAKE.—W. Skewis, R. C. Seccombe, June 19: In the adit level west the lode is fully 2 ft. wide, and carries a good leader of rich quality copper ore on its hanging-wall, the remainder of the lode being good work for tin. In this level east on counter the lode has improved to 1½ ft. wide, and produces

good saving work for copper ore. We are pushing on the cross-cut north to intersect the Ding Dong lode with all possible speed. Altogether the prospects of the mine have much improved during the past two weeks.

OWEN VEAN AND TREGUTHA DOWNS.—William Derry, Henry Prin, Vernon James, June 19: All our machinery is working exceeding well, including the new engine and two pneumatic stamps, the latter of which reduce our tinstuff with great speed, though the grates are the finest in use. We hope to set the other two heads at work on Saturday next, the winding machinery for drawing the stuff to the passes being almost complete. The engine-shaft is now about somewhat more than 10 fms. below the 50, and to-day another pump is added to the sinking lift. The whole of our stope are yielding excellent tinstuff, which we feel confident our returns will soon prove. The masonry of the

worth 2 tons to the fathom, and is showing some small branches of lead, which I think will enlarge shortly. No. 1 stope in the back of this level is producing 30 cwt. of blonde and 20 cwt. of lead per fathom.—Goddard's Lode: No. 1 stope in the back of the 33 fm. level south is producing 30 cwt. of lead and blonde per fathom. No other change throughout the mine. The continued dry weather is beginning to be felt in our reservoirs.

VAN.—W. H. Williams, June 19: The cross-cut north at the 120 for Edward's shaft is driven 13 fms. The winze sinking below the 120 west is down 12 fms. 4 ft. I am glad to report that we have still ore ground in the south side of this winze. When we reach the 135 I recommend that we cross-cut south from the bottom of the winze to prove the ore ground gone down on bottom of the long cross-cut. This done we shall drive westward at the 135 to communicate with Edward's shaft. The two stope in the back of the 120 are without change, save that the driving eastward from the eastern stope has fallen off in produce; but we expect that it will come in again in our next cut, as we know that it extends eastwards as we go up. The 105 west is suspended at present. The stope throughout are without material change since my last report. We have now only three stope at work in the back of the 75 beside one party picking to finish up, and the eastern extension, which is worth 25 cwt. of lead per fathom. Edward's shaft is sunk to the 120, and we are preparing to go down to the 135. The rock-drills continue to work well.—**Surface:** All surface is going on regularly; machinery in good order. Our sale this month is 100 tons of lead and 100 tons of blonde; but we shall have another 50-ton parcel ready in a few days.

WEARDALE.—J. Blenkin, June 14: Killhope: Killhope Head Vein: The Coal Sill drift in the east end still retains its value—30 cwt. per fathom; we have set men to push the end away until the end of the month, and leave the stope, so as to prove the vein, and if present appearances continue, to push the main level forward in great limestone at the Quarter end.—Trent Level West: The stope is very hard, and slow progress made.—Hodgson's Shaft: The sinking is somewhat retarded by water in the shaft; we are daily expecting this to bleed through to the rise below, and hope soon to make communication. The ore workings in the Killhope lead vein and flats are looking a little better.—Burke Pasture: Donaldson's Level: The Burke Pasture end continues kindly. The vein is strong, and worth fully 30 cwt. of ore per fathom. Nattrass Gill drift is without change, worth 8 cwt. per fathom.—Waugh's rise in pit under quarry hazel: We expect to reach the hazel sill within a fortnight. The indications in the plat are very favourable for ore above. There is a slight improvement in the ore workings or tribute pitches throughout this mine.

Greenlaw.—Dent's drift is looking a little more kindly; vein 2½ ft. wide and worth 5 cwt. of ore per fathom. The tribute pitches above Watson's drift, middle level, have improved a little during the past week; worth from 15 to 30 cwt. of ore per fathom; also the working above Lowe's drift worth from 16 to 30 cwt. of ore per fathom. The stope above Quarry level are looking very favourable. Lee's stope, west from Foster's rise, is worth 60 cwt. per fathom; two stope valued at 12 cwt., four at 15 cwt., two stope at 20 cwt. The stope are without change in Dent's level—worth from 15 to 20 cwt. per fathom.—Grove Rake: The middle drift east is looking better; worth 6 cwt. of ore per fathom. The west is also slightly improved; worth 4 cwt. per fathom. Stopped for the present to open out east from Lonsdale's rise for ventilation and stopping. The ore stope or tribute pitches are without change; worth from 10 to 35 cwt. per fathom. The clearing and repairing of water level down whimsy is progressing, and also opening and repairing of Coal Sill drift east towards Kidd's sump. We are making good progress with the new reservoir. The alterations made with the dressing machinery answer well.—Bolt's Burn: The Coal Sill drift end looks well; vein 4 ft. wide, and worth over 3 tons of ore per fathom. The rise from Watt's level to Coal Sill drift is repaired, and we are now ready to commence rise into Little Limestone. In Slatley Hazel drift the end is looking promising; worth 30 cwt. of ore per fathom; ground firm and slow to work—indications of the two leads or branches of vein soon uniting, when further improvement may be expected.

WEST CARADON.—N. Richards, June 19: There is nothing calling for special remark throughout the mine. Gilpin's lode in the 33 west is producing stones of copper ore. The rise and stope in the back of the adit level on this lode are yielding together about 3½ tons of ore per fathom. A stope in the bottom of this level will yield 1 ton of ore per fathom.

WEST CREBRO.—J. Andrews, June 18: The lode in the engine-shaft, sinking below the 80, is 3 ft. wide, composed principally of quartz, capel, mundic, and a little copper ore. There is no change in the 80 west, as no lode has been taken down for the week.

WEST KITTY.—W. Vivian, June 19: There is no particular change to notice since last report, but the ends rather more than maintain their previous valuation.

WEST VOR.—S. Harris, June 19: I have been underground this morning, and am pleased to inform you that the lode in the adit level continues to improve both in appearance and value. I assayed samples from the lode, which is fully 5 ft. wide, producing 13 lbs. of tin per ton of stuff; but is very foul with mundic and copper, with the present price for tin, make it unremunerative to sell in the stone to carry miles away to a stamp. I never saw a more congenial mineralised lode in the district at the depth, and feel confident if we could get down to the junction of the lodes we should have great success.

WHEEL COMFORD.—W. Rich, H. Treganowan, June 17: The lode in the bottom of the shallow adit is not so good for tin as it has been; this falling-off in value of the lode, and the low price now obtained for the metal has compelled us to suspend the stope operations. The lode in the bottom of the 50, or deep adit, is worth 8½ per fathom for tin. We have examined Morcom's shaft down to the 20 below adit, but find it is in a bad state of repair, and will take a great deal of timber to make it safe as a working shaft.

WHEEL OREBOR.—H. Phillips, P. D. Holman, June 17: There is no change in the new shaft sinking below the 144 since last reported. The lode in the 144 driving east of new shaft contains spar and mundic, intermixed with copper ore. The lode at this level driving west of shaft will yield 1 ton of ore and 4 tons of mundic per fathom. The stope in back of this level will yield 4 tons of ore and 4 tons of mundic per fathom. The lode in the 132, east of new shaft, will yield 8 tons of ore per fathom. The lode in the 132 driving west of winze will yield 1 ton of ore per fathom. The stope in the back of this level will yield 3 tons of ore and 2 tons of mundic per fm. Good progress is being made in driving the 72 east of No. 1 adit; the lode has a promising appearance for the production of mineral. The lode in the winze sinking below the 48 will yield 4 tons of ore and 3 tons of mundic per fathom. The lode in the stope in the back of this level will yield 4 tons of ore and 4 tons of mundic per fathom. There is no change during the week in any other part of the mine.

WHEEL PEVOR.—W. T. White, J. C. King, June 18: All the points in operation throughout the mine are being vigorously pushed forward. On Friday last we effected communication between the deep adit and shallow adit fathom levels; this has now given us good ventilation on the new lode at both these levels as well as made available for working a fair section of tin ground. The lode in end driving west of main winze at the 18 is worth 8½ per fathom. This end is opening up good tribute ground, and when communicated to the cross-cut, now driving at the 18, will lay open a good section of ground. We hope to accomplish this in about ten weeks, when an increased quantity of good average tinstuff will be raised from this lode. We have no other particular change to report. The lode in the new shaft sinking below deep adit level on Great North Downs lode is still of the most promising character, and we believe when we get a little deeper, a good lode of ore will be met with. The tribute pitches throughout the mine are also producing fair quality tinstuff.

OLD SHEPHERDS.—These shares, in sympathy with the general market, have, it is said, been dull, but "close with a better tone, the tendency being to buy." This mine is on the eve of proving the correctness of the various anticipations formed of the great value of the lode left standing at the 112. It is well known that, even with lead at the present price, a lode worth 4 tons to the fathom and rich for silver will pay the company well

Roman Gravels, 2*1/2* to 3*1/2*; the 100 tons of lead ore sold yesterday realised 61*1/2*. 15s. The valuation of the ends and stopes are about the same as at last report. Mr. Jasper More has been asked to make a reduction in the royalty during the great depression in the price of lead.

South Devon United, 2*1/2* to 3*1/2*; the 200 tons of ore sold on Thursday for 14*1/2*l. The lode in Martin's shaft, sinking below the 120, is still worth 2*1/2* per fathom.

South Wheal Frances are reported to have been in demand at 8*1/2* to 9; the mine continuing to improve and the sales of tin increasing, so that a good dividend is expected at the next meeting.

Wheal Crebor, 1*1/2* to 2*1/2*; the mine continues to look well throughout. The sale of ore on Thursday realised 14*1/2*l., which ought to leave a good profit.

Asia Minor, 4*1/2* to 5*1/2*; the directors have received advices of a further shipment of ore to Liverpool. A parcel of silver-lead ore sold during the past week realised upwards of 18*1/2* per ton.

Ruby and Dunderberg, 5*1/2* to 6*1/2*; the usual weekly report advises good shipments of tribute ore from the Dunderberg Mine. The chief work going on at the Home Ticket Mine is sinking the winze from the fourth level, in which there are very good indications of a large body of ore being near. At the Lord Byron Mine connection with the cave was expected to be made during the following week. The rich seam of ore met with 40 ft. above the cave was improving, the size having increased to 2 to 3 ft. wide and 8 to 10 ft. long. The half-yearly meeting of this company is called for July 1.

The Birdseye Creek Gold Mining Company on Tuesday declared a dividend of 2*1/2* per share, free of income tax, payable June 30.

The Copiapo Mining Company directors have declared an interim dividend for the current quarter of 1*1/2* per share, payable on June 28.

The Cape Copper Mining Company will hold their general meeting on July 9, to receive the reports and accounts for the year 1883, and for general purposes. The directors having appointed Mr. Edward Joseph Carson as a director, in the vacancy on the board caused by the death of the late Mr. Focking, such appointment will be submitted to the shareholders for confirmation; and Messrs. W. Bevan and E. J. Carson retire from office at the meeting, but will offer themselves for re-election. Mr. R. Mackay will offer himself for re-election as auditor.

The Newport Abercarn Black Vein Steam Coal Company have called the general meeting for July 11, and will there recommend that a dividend should be declared the same as last year—on the ordinary shares 7 per cent., making 10 per cent. for the year, and on the preference shares a dividend of 10 per cent. per annum, less interim dividend paid in January last, carrying forward 28*1/2*l. 5*1/2* s. 8*1/2* d., as against 19*1/2*l. 1*1/2* s. 5*1/2* d. last year.

The Ruby and Dunderberg directors' report prepared for presentation at the meeting on July 1 states that in connection with miners' wages it was decided to do away with all work on day-pay, and instead to contract for the necessary dead-work, and extract the ore on a tribute arrangement. This has been done since January with very considerable advantage to the company, the miners' wages for three months being about one-half what they would have been under the old plan; by last account, however, this arrangement had to be modified, as the men declined to continue working on the old scale, but the directors are persuaded that the tribute plan is the fairest for all parties. The directors would also mention that the expenses of the management at Eureka have been considerably reduced, all the staff having readily agreed to the proposals made by the directors on this matter. For the first six months of the financial year (October to March) the receipts at Eureka did not cover the expenses; but this deficiency is now being rapidly worked off, and with the summer and autumn months before them, and fair prospects at the three mines now being worked, they trust some good profits will be made, so that in December they may be able to lay before the shareholders a satisfactory statement of accounts for the whole year.

The St. John del Rey directors' report for the meeting on Wednesday shows that the company have in England 26,609*1/2*. 8*1/2* s. 3*1/2* d. assets to pay 17,750*1/2*, and there are 90,000*1/2*. bills in transitu. In Brazil they have 6260*1/2*. 2*1/2* s. 10*1/2* d. to meet 97*1/2*l. 1*1/2* s. 8*1/2* d. The financial position of the company has received the earnest and continued attention both of the board and the committee, and as additional funds are required for the full development of the mine and surface works at Cuiaba, and to meet the excess of expenditure consequent on the low yield of the mineral at Morro Velho, and also to provide for the 50,000*1/2*. debentures that fall due Nov. 30, 1885, the board and the committee are unanimously of opinion that the best form in which to raise the money will be by an issue of 7 per cent. mortgage bonds for a period of five years, to an extent not exceeding 75,000*1/2*. specially secured by a mortgage of the Cuiaba Mine and property.

The Quicksilver-Wave Amalgamator Company have just treated a further lot of about 1 ton of Norwegian ore from the mines of the Oscar Company. The value of the stone was 8*1/2* ozs. per ton; the gold actually got from 19 cwt. was 7*1/2* oz., equal to 8 ozs. per ton. Among other ores treated by the above company was a lot—*1/2* ton—of heavy sulphure ore (unroasted); the result of its treatment was the saving of two-thirds more gold than the mine owners are at present able to obtain.

It is notified that the outstanding bonds of the Chinese Imperial Government Eight per Cent. Loan, 1877, and the last coupon of 2*1/2* s. 8*1/2* d. per bond, are now due, and will be paid in London by the Hong-Kong and Shanghai Banking Corporation at their offices.

The second quarterly dividend of the Uruguay Unified Five per Cent. Loan, 1883, together with the bonds drawn on April 1, will be paid in London on and after July 1 next, at the offices of Messrs. J. Thomson, T. Bonn, and Co.

The Agra Bank notify that they will pay the coupons of the Assam Railways and Trading Company (Limited) falling due on July 1.

The coupons and drawn bonds of the Government of Quebec Four-and-a-Half per Cent. Loan, 1880, due July 1, will be paid in London at the Imperial Bank.

The Colonial Bank directors at the meeting on July 3 will recommend a dividend for the half-year ended Dec. 31, at the rate of 12 per cent. per annum.

The New Zealand Loan and Mercantile Agency Company have notified that an interim dividend at the rate of 10 per cent. per annum for the past half year will be payable on and after July 7.

The Australian Joint-Stock Bank will pay the coupons of the Corporation of Brisbane (Queensland) Town Hall Debentures, due on July 1, and will also pay the debentures falling due the same date.

Mr. Justice Chitty has appointed Mr. John H. Tilly, chartered accountant, receiver on behalf of the debenture-holders of the Silver Peak Mining Company.

The New York Central and Hudson River Railroad earnings for the six months ended March 31 were—Income from all sources, after deducting operating expenses, \$6,216,000; interest, taxes, and rentals, \$3,282,000; leaving net income from all sources, \$2,934,000, being at the rate of 6*1/2* per cent. per annum.

LESSORS, AND THEIR ROYALTIES.—With reference to a remark in last week's *Mining Journal*, we are informed that if "within the last 12 months" royalties at Tankerville Great Consols were remitted it was on condition of sinking and other deadwork being done; and it is pointed out that even this qualified concession came too late. If more liberal terms had been agreed to by the lessors, at a considerably earlier date, when they were asked for, it is said that the shareholders would probably have been induced to take up more of the preference shares, and thus supplied more capital.

KONGSBERG CONSOLIDATED SILVER MINES.—Intending investors should be reminded that next Tuesday (24th inst.) the application list will be closed. It is understood that the general subscriptions already received include considerable ones from influential people and capitalists, so that there is very little doubt of this company being as successfully established, as its sister undertaking in the same hands—the Oscar Gold Mining Company—the shares of which are at a premium, and are, it is thought, likely to rise very much. The Kongsberg Silver Mines have the great recommendation that they have been proved to be rich. The statements of the large returns made from them have been taken from the books in the hands of the Government officials, their correctness being certified by the treasurer of the State mines, and the Master of the Royal Mint. The workings in these mines have not been carried either in extent or depth one-third so far as their immediate neighbours, which are more than 300 fms. deep, and continue exceedingly rich and profitable. Mr. Basch predicts "a brilliant future" for them,

and Captain Plummer says that with proper supervision and management they ought to be worked at much less cost than the State mines. Fuller information is given in the prospectus in another column.

OSCAR GOLD MINE.—We are officially informed that out of 29 cwt. of stone from No. 1 lode, which was lately sent from this mine to London, there have been extracted 15 ozs. 7 dwts. of fine gold, being at the rate of rather over 10 ozs. per ton. The bar of the precious metal which represents this rich result can be seen by the shareholders at the office. It appears that a pamphlet has been published in Norway on "Gold Mining on Bommel Island." The newspapers have been quoting from it at length, and the general tenor is very favourable. In the London Pall Mall Gazette of Monday last it was stated that "the recently-discovered gold mines at Bommelö, in Scandinavia, are, at present, subjects of great interest in the North. A correspondent of the Norwegian Dagblad, who has recently paid a visit to the district, describes the place as being yet very primitive; but according to an old English gold digger, who has seen a good deal of digging in America, Australia, and Africa, the Bommelö Mines are among the most promising he has ever come across." Half of the Oscar Company's machinery left Hull on Tuesday for their mines, and the rest will be dispatched next week. In about two months it will probably be at work.

SOUTH AMERICAN JOURNAL.—The constantly increasing commercial intercourse between this country and the South American States has induced the publishers of the fortnightly bearing this title—Messrs. Bates, Hendy, and Co., the advertising agents, of Walbrook—to issue it in an improved and much more handsome form, to commemorate its reaching maturity—the full age of 21 years. It is a really readable and interesting periodical, and cannot fail to be particularly acceptable to those having business or other connections with the countries to which it relates.

MINERS' WAGES IN CORNWALL.—It is reported that at several mines in Cornwall and elsewhere the wages of miners have been reduced 5*1/2* to 7*1/2* s. 6*1/2* d. per man per month, and in Wales as much as 10*1/2* to 12*1/2* s. 6*1/2* d. per man per month; it is moreover expected that a further reduction will be made in the wages of surface hands.

RUSSIAN AIDS TO INDUSTRY.

With regard to the levy of new duties on coal brought to the Black Sea ports (chiefly in British ships), on cast-iron, and on hides suitable for boot-soles, it is remarked that the duty on coals will be strongly opposed, because if ships, in consequence of higher duty on coal, are forced to come in ballast, higher rates must be charged for the return cargo of wheat, already so difficult to dispose of. The Russian coal, moreover, which the tax proposes to protect is far inferior to the British in all respects. The Finance Minister in his report, after pointedly remarking that the "Estimates of the Financial Administration for 1884, although not very favourable, are not disquieting," comments upon the existing commercial and economical crisis, upon the low prices ruling for wheat, and upon the low exchange value of the rouble. His Excellency attributes want of elasticity in revenues for 1883, and the difficulties experienced by industry and commerce, to the low prices ruling for wheat, owing to competition of the United States, Canada, and India. This stagnation in the corn trade affected landowners, who consequently bought less of manufacturers.

Manufactured goods also suffered from over-production, chiefly as regards cotton goods and railway rolling-stock. But his Excellency promises further help to industry by new customs duties, although he admits that since 1882 the customs duties have caused exports to exceed imports by 27,000,000 roubles. In order to assist impoverished landholders, whose land has already been mortgaged to private banks or individuals, his Excellency announces a law by which the Treasury will be able to lend them money at short date on their sole pro-missary notes. Besides this, His Excellency hopes to create a special State Bank for the purpose of making loans to landholders at long date, and he alludes to the success attending the establishment of rural banks, through which peasants can obtain money for the purchase of land. These banks, although recently established, will be increased from 11 to 18 during 1884.

With regard to the state of the paper currency, his Excellency is evidently despondent, and anxious for the future. He observes that the low exchange value of the rouble continues to form one of the most unfavourable features of the financial and economical situation, and he attributes this calamity to the tendency of foreign capitalists to sell in Russia interest-bearing bonds issued in paper money. It is difficult to understand the policy of protecting languishing manufactures by further prohibitive customs duties calculated to hamper agricultural industry, and consequently the exchange value of the rouble.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Buenos Ayres Six per Cent. Debentures, 18*1/2*l. 10*1/2* s.; British Gas Light (Limited), 11*1/2* to 11*1/2* s.; Bombay New (Limited), 4*1/2*%; Commercial Gas, 24*1/2* s.; Gas Light and Coke, A. Ordinary, 20*1/2* to 21*1/2* s.; ditto, H. 7*1/2* per cent., 14*1/2* to 14*1/2* s.; ditto, J. 10 per cent., Part., 23*1/2* to 25*1/2* s.; ditto, C. 10 per cent., Part., 23*1/2* to 25*1/2* s.; ditto, E. 10 per cent., Part., 23*1/2* to 25*1/2* s.; Imperial Continental, 12*1/2* to 19*1/2* s.; Monte Video 10*1/2* to 17 ex div.; Oriental (Limited), 8 to 9*1/2* s.; ditto New, 5*1/2* to 6*1/2* s.; Para (Limited), 5 to 5*1/2* ex div.; Rio de Janeiro, 2*1/2* to 2*1/2* s.; South Metropolitan A, 25*1/2* s.; ditto B, 21*1/2* to 22*1/2* s. Gas stocks quiet. Rio de Janeiro very flat upon the circular issued by the company stating that the concession had been given to a rival company; if the new company is successfully floated the old will be paid off. Buenos Ayres and Monte Video Gas easier.

INSURANCE SHARES.—According to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, the principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been:—Alliance British and Foreign, 10*1/2* to 11*1/2* s.; City of London Fire (Limited), 9*1/2* to 11*1/2* s.; Fire Insurance Association (Limited), 1*1/2* to 11*1/2* s.; Indemnity Marine, 14*1/2* s.; London, 4*1/2* to 4*1/2* s.; Liverpool and London & Globe, 1*1/2* to 2*1/2* s.; North British and Mercantile, 2*1/2* to 2*1/2* s.; Ocean Marine, 5*1/2* s.; Universal Marine, 6*1/2* s.; Royal Exchange, 3*1/2* to 3*1/2* s.; Insurance dull.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. Webb, are given in tabular form in the last page of the Journal.

At Truro Ticketing, on Thursday, 26*1/2* tons of ore of 5*1/2* average produce, and containing 151 tons 13 cwt. of fine copper, were sold for 65*1/2*l. 9*1/2* s., being 2*1/2* s. 6*1/2* d. per ton of ore, 8*1/2* s. 7*1/2* d. per unit, or 43*1/2* s. per ton of fine copper in the ore, and an average standard of 90*1/2*%. Subjoined are the particulars of the two last sales:—

Date. Tons. Standard. Produce. Per ton. Per unit. Ore copper. June 5 ... 1090 ... £7*1/2* 15 0 ... 8*1/2* ... 9*1/2* s. 5*1/2* d. ... 48 0 ...

... 19 ... 2644 ... 90 19 0 ... 5*1/2* ... 2 9 6 ... 8 7*1/2* ... 48 0 ...

Compared with the last sale the decline has been in the standard 2*1/2*, and in the price per ton of ore about 2*1/2* s. 4*1/2* d. The sales and amounts realised were:—Devon Great Consols, 800 tons, 12*1/2* s.; Wheal Crebor, 507 tons, 14*1/2* l.; South Caradon, 350 tons, 12*1/2* s.; Bedford United, 203 tons, 6*1/2* l.; South Devon United, 200 tons, 17*1/2* s.; Gunnislake (Clitters), 151 tons, 6*1/2* l.; Holm bush, 150 tons, 13*1/2* l.; Ganton, 82 tons, 3*1/2* l.; East Caradon, 62 tons, 24*1/2* s.; Marks Valley, 90 tons, 19*1/2* l.; Glasgow Caradon, 60 tons, 17*1/2* s.; Mid-Devon, 19 tons, 5*1/2* l.

LEAD ORES.			
Date.	Mines.	Tons.	Price per ton.
June 14	Fordale	50	£ 5 15 0
	— ditto	50	8 16 6
	D'Eresby Mountain	20	8 16 6
	Pierrefitte	70	6 11 0
19	Van	40	7 15 6
	— ditto	40	7 17 6
	— ditto	20	8 1 6

Purchasers.

Date.	Mines.	Tons.	Price per ton.
June 19	Van	100	£ 1 13 6

Vivian and Sons.

BLACK TIN.			
Date.	Mines.	Tons.	Price per ton.
June 19	Phoenix United	63	£48 10 0

Purchasers.

C. PASS AND SON, BRISTOL,

ARE BUYERS OF

LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES &c.
and DROSS or ORES containing
COPPER, LEAD, AND ANTIMONY

GEO. G. BLACKWELL,

GEORGE ELLIOT & CO.,

(GEORGE ELLIOT & CO. since 1864, and previously
GLASS, ELLIOT & CO., Makers of the First Atlantic Cable),
WIRE ROPE MANUFACTURERS.

LONDON OFFICES—

23, Great George St., Westminster, London.

WORKS—
BUTE DOCKS, CARDIFF.SPECIAL IMPROVED PLOUGH STEEL,
PATENT STEEL AND IRON WIRE ROPES

For Colliery, Mining, Agricultural, and General Purposes.

ROPES FOR AERIAL TRAMWAYS,

SHIPS' RIGGING.

COPPER LIGHTNING CONDUCTORS,

GALVANISED STRAND,

SPECIALLY FLEXIBLE ROPES, &c., &c.

Care is given to ensure the Ropes being constructed in the way most suitable for their particular work, and by the use of specially selected and tempered metal, the greatest possible uniformity is obtained.

This day, crown 8vo., price 12s. 6d., cloth.

A TREATISE ON EARTH AND OTHER MINERALS AND MINING. By D. C. DALES, F.G.S. Uniform with, and forming a Companion Volume to the same Author's "Metalliferous Minerals and Mining." With numerous Illustrations.

CROSBY LOCKWOOD and Co., 7, Stationers' Hall-court, London, E.C.

This day, crown 8vo., price 3s. 6d., cloth.

THE BLOWPIPE IN CHEMISTRY, MINERALOGY, AND GEOLOGY. Containing all known methods of Anhydrous Analysis, many Working Examples, and Instructions for Making Apparatus. By Lieut.-Colonel W. A. ROSS, R.A., F.G.S. With 120 Illustrations.

CROSBY LOCKWOOD and Co., 7, Stationers' Hall-court, London, E.C.

This day, price 3s., cloth.

STEAM AND MACHINERY MANAGEMENT: A Guide to the Arrangement and Economical Management of Machinery, with Hints on Construction and Selection. By M. POWIS BAILE, M.Inst.M.E., A.M.Inst.C.E. With numerous Illustrations.

CROSBY LOCKWOOD and Co., 7, Stationers' Hall-court, London, E.C.

Notices to Correspondents.

FRONT PAGE ADVERTISEMENTS.—The front page of the *Mining Journal* is reserved exclusively for the advertisements of sharedealers; and, with the exception of the first line of each advertisement, none but small type (nonpareil) can be admitted. The demand for front-page space is now vastly larger than the space at disposal, and those excluded naturally and justly complain of an arrangement which still further limits the number of advertisers admissible.**BALANCING—"E. F."** (St. Agnes).—You say: If the length of the rods be 300 fms. and the weight 2 cwt. per fathom would it not be an advantage to have one balancing arrangement at surface instead of balancing at each 100 fms. for example? Certainly not. In the first case the rod at surface would have to be of sufficient strength to bear 30 tons (the weight of all the rods) in addition to the weight representing the work to be done. If each 100 fms. be balanced the useless strain on the rod at surface would be reduced to about one-third, or to a little more than 10 tons; so that the liability to breakage would be reduced. As to your second question, we do not know whether it has "ever been attempted to work a plunger with a taper wire rope at 300 fms. deep," but should think not as the rope would quickly knock itself to pieces; to keep 100 fms. of hanging rope free from swinging is impracticable. As to merely substituting 100 fm. lengths of wire rope for rods we have not heard of its being tried, and should doubt whether the balancing of the lengths would be your main difficulty. Wire rope could probably be economically used in Cornish mines much more largely than it is, but you must not use it like a line of pump rods.**PHI. BETA KAPPA—"H. K. C."** (Durham).—We cannot off-hand give an outline of the constitution of the society, but it would probably be easy to obtain it; you might consult Four Years at Harvard if that be in your university library. It was a secret society until about half-a-century ago, and its object was to encourage the study of science and literature. We believe there are still lodges at Harvard, and at Columbia College, New York, and corresponding societies, often taking two or three Greek letters for the name, exist in most American universities. Since the facilities for obtaining "books and instruction have been so much greater than formerly the necessity for students' fraternities has, however, been less. Since about 1825 or 1830, we forget the exact year, all men in colleges where a Phi Beta Kappa lodge exists have been initiated almost as a matter of course if they graduated in honours, and the higher classmen have also been admitted, so that the badge indicates academic merit. In America the assumption, without anything to justify it, of academic and military titles is common, but we have not heard of anyone exhibiting the Phi Beta Kappa, and attempting to give the sign.**COST-BOOK SYSTEM—"W. J."** (City).—The statement that vendors and promoters can get nothing out of floating a Cost-book concern is untrue; at least, they do it. Theoretically the Cost-book System is unobjectionable; but in practice Limited Liability is the sole system that really limits the shareholders' responsibilities. Briefly stated, a Cost-book partnership is a common law partnership with unlimited liability; but with a clause in the deed of copartnery that any partner can withdraw at any time upon paying his proportion of the liabilities of the partnership up to the date of withdrawal without being compelled to give notice to and obtain consent of every other partner. The system is generally preferred by miners, because when a capitalist is once entrapped into a non-dividend Cost-book mine it is easier to continue draining him, as comparatively few have the courage to sacrifice all their previous payments what they are assured will be "positively the last call" (?) which last call is in most cases made meeting after meeting for years. The modes in which vendors and promoters secure their profit, often as much as in the worst limited concerns, are innumerable, but all very simple. The mine is put into Cost-book company with perhaps £100 thousand considered (£1) 5%, paid, which gives the promoters 20,000/- purchase money, minus the few hundred pounds for wear out or other plant to have appearance; and the promoters, by what would be a conspiracy if the parties were honourable to each other, call the market quotation 9½ to 10½, or any other price, which if the shares be sold gives them another 30,000/-, though there may not be £10. of working capital. Limited Liability is at least more straightforward.**Received—"J. B. B."** (Jersey).—Yours of June 14 not received. You ask: "Is the address to be kept a secret, or is it the want of a penny stamp for reply, which I now enclose?" As we appreciate your excellent specimen of Jersey politeness we readily inform you that the address desired is 54, Old Broad-street, the initials of which, with number, you will find in the corner of the note we sent you by post—"L. F. R." (Brixton): Our correspondence columns must not be used for advertising purposes. Your letter is a simple and transparent puff of one firm, and is, moreover, not accurate. Simultaneous blasting is a subject worth discussing, but the discussion must be fair, straightforward, and convey practical information—"W. W. U." (California): All such matters sent to our office are willingly inserted, and without charge. Rev. E. T. M.: Inserted; but without the parables—"E. D. A."—"T. J. M." (Idaho Springs): Next week.THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, JUNE 21, 1884.

THE INSPECTORS OF MINES.

As there is no chance of a new Mines Bill being discussed during the present Session, Mr. BURT proposes to bring forward the question of the appointment of additional Inspectors of Mines by resolution, on July 4, when he will move—"That, considering the great development of the mining industry of Great Britain, in recent years, the number and extent of the mines, their increasing depth, and the large number of persons employed therein, this House is of opinion that at the time has come when there should be a considerable addition to the staff of Inspectors of Mines." The step is evidently intended to force the hand of the Home Secretary, who already has power to appoint Inspectors, for Sec. 48 of the Mines Regulation Act says that "A Secretary of State may from time to time

appoint any fit persons to be Inspectors of Mines to which this Act applies, and assign them the duties, and may award them such salaries as the Commissioners of Her Majesty's Treasury may approve, and may remove such Inspectors." But the resolution aims at the appointment of a number of ordinary miners or officials connected with mining associations—which is the same thing—to the position of Assistant Inspectors, indeed this has been clearly and emphatically stated at several of the miners' meetings recently held. The appointment of practical and trained mining engineers as additional Inspectors has been objected to on the reasonable ground that it is not desirable to lessen the responsibility of certificated mine managers. This unquestionably would be the case were the number of Inspectors to be materially increased in any way, as the managers would seek their advice on ordinary matters, and then in the event of anything serious taking place, such as a fatal explosion, the certificated official could turn round and say that he had carried out the views and wishes of the Inspector, and was consequently free from all responsibility. Such a dual control would be in the highest degree objectionable, and would greatly affect the safety of the mines. As to the advancing of ordinary miners to the position of sub-Inspectors, there can be nothing to justify it, seeing that the practical knowledge of such men is principally confined to the mere getting of coal, which does not even represent skilled labour. In the event of the Home Secretary not meeting the proposal, it is believed that Mr. E. BARNES, one of the members for East Derbyshire, and principal owner of the Grassmoor Collieries, will oppose it

conduct help forward the movement, or retard and possibly prevent the better trade by constant suicidal agitation.

THE COAL CRISIS IN STAFFORDSHIRE.

For the present the threatened strike of 16,000 colliers in South Staffordshire is happily averted. The olive branch has not, however, been held out as might have been expected considering the false position which has been taken up by the men. It has been borne by the masters. The Earl of DUDLEY set the example. Wishing to prevent, if it were possible, the serious interruption to business in alike iron and coal, which seemed imminent, with its attendant miseries upon the families of the workpeople, his lordship's colliery agents consented, as last week went out, to give his lordship's men 14 days' notice before calling upon them to accept the reduction. Matters having assumed this position, the committee of the Coal-masters' Association were summoned to consult. The result of their deliberation was the conceding to the rest of the men the terms which the Earl's colliers had been offered.

Under this arrangement the colliers continue at work. On Monday and Tuesday some of the pits were idle, the strike having begun early, but work has since been generally resumed. At a few exceptional pits, however, the men are "out," alleging that the masters now refuse to allow them to descend as they declined to go down on Monday. Fortunately for the men the exceptions are not important. The generosity of the Staffordshire masters in allowing the course they have, in face of the depressed state of the trade, and the consequent fining down of profits to almost *nil*, is conspicuous, the more so as it was unlooked for. What course matters will assume after June 28 it is scarcely possible to tell.

In connection with this subject the subjoined return showing the rate of wages, and the price of Earl DUDLEY's coal, by which wages have been regulated during the past 19 years, will be of interest:—

Year.	Dates.	Price of coal per ton.	Thick coal miners' wages.	Thin coal miners' wages.	Wolverhampton side Dudley side.
1864..July	18.....	11 4	4 6	3 3	3 0
1868..May	25.....	10 0	4 0	2 9	2 6
1869..Sept.	29.....	8 3	4 0	2 9	2 6
1869..Nov.	17.....	9 3	4 6	3 0	2 9
1871..Sept.	30.....	10 3	5 0	3 3	3 0
1871..Oct.	13.....	10 3	5 0	3 6	3 3
1872..Jan.	8...	Miners began to work till 4 o'clock Mondays and Saturdays, and 5 o'clock the four middle days of the week.			
1872..Jan.	24.....	11 3	5 0	3 6	3 3
1872..Feb.	5.....	12 0	5 0	3 6	3 3
1872..March	18.....	Miners began to work nine hours per day.			
1872..March	19.....	13 0	5 0	3 6	3 3
1872..July	1.....	Miners began to work eight hours per day.			
1872..June	29.....	15 0	5 0	3 6	3 3
1873..Feb.	18.....	17 0	5 6	4 0	3 9
1873..March	4.....	19 0	5 6	4 0	3 9
1874..March	11.....	16 0	5 6	4 0	3 9
1874..July	16.....	16 0	4 6	3 3	3 3
1874..Oct.	1.....	13 0	4 6	3 3	3 0
1874..Oct.	5.....	13 0	4 0	3 0	2 9
1875..June	30.....	11 0	4 0	3 0	2 9
1875..July	17.....	11 0	3 6	2 9	2 6
1875..Oct.	1.....	11 0	3 6	2 9	2 6
1875..Nov.	1.....	13 0	4 0	3 0	2 6
1876..May	1.....	11 0	3 6	2 9	2 6
1877..Nov.	1.....	9 0	3 0	2 6	2 3
1879..May	5.....	8 0	2 9	2 4 ½	2 1 ½
1879..Nov.	1.....	9 0	3 0	2 6	2 3
1879..Dec.	1.....	10 0	3 3	2 7 ½	2 4 ½
1880..Jan.	1.....	11 0	3 6	2 9	2 6
1880..April	1.....	10 0	3 3	2 7 ½	2 4 ½
1880..June	1.....	9 0	3 0	2 6	2 3
1881..Feb.	1.....	10 0	3 3	2 7 ½	2 4 ½
1881..April	1.....	9 0	3 0	2 6	2 3
1881..Oct.	1.....	10 0	3 3	2 7 ½	2 4 ½
1882..Jan.	1.....	10 0	3 4	2 8	2 5
1883..Oct.	8.....	11 0	3 8	2 10	2 7

The colliers profess themselves as directly opposed now to accepting the award as they were at the beginning of the dispute. Their leaders continue their unfounded assertions respecting alike arbitrators and employers—assertions which are as wild as they are unjust. They entirely and conveniently fight shy of the charge under which they lie of repudiating engagements honourably entered into with the masters on behalf of their constituents. And they purposely forget that the rules of the Wages Board state most distinctly that the President's decisions shall be "final and binding." With such a rule as this before him Mr. JOSEPH ROWLANDS is perfectly justified in stating that he cannot consent to attend any meeting of the board for the purpose of reopening the question determined by his award. Any other reply would have been, to say the least, an indignity to the office of President. We still hope that the Staffordshire colliers will, though late in the day, recognise the duty which is upon them to manfully abide by promises fairly and distinctly made; but that if they refuse to take this course, the colliery owners will be able to see their way to continue the generous position which they have taken up by coming to some arrangement to prevent a stoppage of industry in this oldest of our coal fields.

SCOTCH PIG-IRON WARRANT MARKET.

Mr. W. WILSON (Glasgow, June 19) writes:—The warrant market has improved, and the price is 6d. higher on the week. In the absence of outside business there have been considerable operations on trade account. The firmness shown by Cleveland ironmasters in adhering to their fixed prices has helped to strengthen the market. Reports from the different iron centres read rather better in some cases; but generally speaking there is little improvement to speak of. Shipments are fair for the week, but are under the figures of last year. There is no change in the number of furnaces blowing: 507 tons were taken out of store here last week, while 153 tons were taken out at Middlesbrough. Business was done during the past week at the following prompt cash prices:—

Thursday, June 12.	Friday, June 13.
41/2, 41/5	41/3 ½, 41/5, 41/4 ½, 41/4 ¾
Tuesday, June 17.	Wednesday, June 18.
41/5, 41/4 ½, 41/7 ½, 41/6 ½	41/7, 41/9, 41/6
	41/4 ½, 41/5, 41/5 ½, 41/5
Price of Scotch Warrants, June 16	41/5 ½
Furnaces in blast in Scotland do	95
Iron in store at this date	589,987
Shipments of Scotch pig-iron for	11,151
week ending June 14	13,255
Do, since beginning of year	15,308
Price of Middlesbrough, No. 3, June 16	37/
Furnaces in blast Middlesbrough dist.	100
Middlesbrough Iron Imported at	118
Grangemouth, week ending	119
June 14	113
Do. do. since beginning of year	121,160
	127,532
	104,572
	140,488

EMPLOYMENT IN THE ENGINEERING TRADES.—The returns issued this month by the various Trades Union societies connected with the engineering industry show a slight decrease in the number of members in receipt of out-of-work support. It can, however, scarcely be said that this is attributable to any actual improvement in the condition of trade, but is due rather to the fact that a number of men who were thrown out of work through the closing of establishments for the recent holidays have since been re-taken on. The return generally of the Amalgamated Society of Engineers are about stationary as to the condition of employment, except that in the Lancashire district there is a slight decrease in the number of men out of work. The average number of members in receipt of out-of-work donation throughout the branches in the United Kingdom is about 3 per cent., and from the various Lancashire districts the

slight decrease in the number of unemployed this month, but a reference to the general tone of the branch reports does not justify the conclusion that there is any improvement in trade, or that the prospects are any more cheering than they have been for some time past. The most discouraging reports are from the marine engineering districts, whilst the long holidays for Whitsuntide testified to the limited orders on hand, or valuable machinery would not have had to remain idle for such long periods. The secretary of the Iron Founders' Society regrets that this month's report does not show any improvement in trade, the outlook pointing rather to still further depression. They were now in the middle of the year, when under ordinary conditions trade should be in full activity, instead of which they had increased stagnation. However, they were glad to notice that their returns showed a slight decrease in the number on donation benefit, but this was so small that the position might be stated to be as near as possible the same as the previous month. By comparing, however, the same period with last year they had 305 more members on the benefit, being 785, as compared with 477 in 1883, and these figures spoke more forcibly than words could do.

MANCHESTER GEOLOGICAL SOCIETY.—The ordinary meetings of the above Society for the present session were brought to a close on Friday last, by one of the series specially arranged to meet the wishes of the large number of mining engineers in the South-West Lancashire district who are members of the Society. The meeting was held in the lecture hall of the Mining School at Wigan, and had been called for the purpose of discussing a paper read by Mr. HALL, Inspector of Mines, which he had previously read, on "What will the Royal Commissioners Report as to Lighting and Blasting in Mines," but there was so small an attendance that it was thought best to adjourn the meeting without entering into any discussion. The want of interest shown by the mining engineers in the district was naturally a matter of surprise, and Mr. W. S. Barratt, who occupied the chair, said he regretted to see so few members present. Two years ago considerable interest was taken in these meetings, and it was hoped that by holding an occasional meeting in Wigan there would be a greater attendance of the mining engineers in the district. A meeting which had been held on trade matters that afternoon might to some extent have been the cause of so few members being present, but it was lamentable they had so small an attendance, and he did not see what they could do but adjourn the meeting. The hon. sec. (Mr. J. S. Martin, Inspector of Mines) remarked that probably the report of the Commissioners would have been made public before the next meeting of the society was held. The next time they met he thought would be with reference to an excursion. After a few remarks from several members, who expressed the opinion that it would be best to adjourn the meeting, this course was agreed to, and the proceedings closed with a vote of thanks to the managers of the Mining School for the use of the building.

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.—The half-yearly meeting of the members of the above Association was held on Saturday, at the Manchester Technical School, Mr. Thomas Horsey, the Vice-President, occupying the chair. There was a good attendance, and 12 candidates, who had been proposed for admission, were elected members. The remaining business was of a formal character, consisting of the election of officers and the making arrangements for the summer excursion of the members of the Society.

ROYAL UNIVERSITY OF MINING AND SCIENCE.

The proposal to create a Mining and Science University for Great Britain appears to meet with no opposition, and almost every correspondent who has referred to the subject expresses his approval of the suggestion, but unfortunately the approval is so invariably qualified that many might be disposed to regard the qualified approval as something like the equivalent of "faint praise," though the more pachydermatous are able to ignore any castigation given, and congratulate themselves on the kind words which accompany it. One was scarcely prepared to find the general unpopularity of the South Kensington School with those to whom now, if not formerly, that School stands in the position of Alma Mater. It might be well to remind them of the Irishman's remark—"Shure an' its better to have had a poor mother than none at all." There can be little doubt that all connected with the School—students and teachers, and, as regards the latter, those in office and those superseded—have suffered in reputation at least from the absence of anything approaching unanimity of aim and feeling, and at present it would be absurd to pretend that the Normal School of Science and Royal School of Mines enjoy such a social or educational rank as could be desired, or even equal to the least successful of our public schools, whilst it can scarcely be named in the same category as our colleges or universities; yet the Institution is older than the University of Melbourne, and has cost the country almost as much as the Melbourne University—which has acquired a reputation equal to our home universities—has cost the colony of Victoria.

This is a state of things which should not exist, and which it is contended need not exist, numerous as may be the conflicting interests which have to be conciliated. A few stones are thrown at ourselves, but the larger number of them are reserved for Professor Huxley, though it is not improbable that whatever ill-feeling may exist towards him is due rather to his, perhaps, too strenuous efforts to secure the recognition of science as one of the learned professions than from any intentional desire on his part to act in conflict with his colleagues. But of the cause of the differences of opinion we know absolutely nothing, nor of the manner in which those differences were developed into open rupture; nor can we comprehend what advantage that knowledge would give us; but we can conceive that a number of men each equally desirous of urging forward the enterprise with which they are connected, but each entertaining strong and perhaps novel views of his own, would come into open conflict the more quickly in proportion to the energy with which their views were supported, and that it would then probably be not a question of the "survival of the fittest," but the survival of him who at the moment had the largest number of "friends at court." All, however, that is now worth consideration is whether any feud which may have existed, or which still exists, can be amicably settled, and the chief object in view—the securing of the recognition of science as one of the learned professions—attained.

In his communication in another column "Scootia," an A.R.S.M., infers that he is aggrieved that the school from which he hails has been, as it were, sacrificed by affiliation; and there is no doubt justification for this, since the Royal School of Mines was affiliated to a school beneath it both in age and reputation, and he may have equally good grounds for his remark that the South Kensington system is adapted to the wants of "science teachers"—a useless and conceited class—rather than to the wants of industrials who seek instruction not with the view of becoming pedagogues, but to be able to profitably utilise their instruction in improving the industries of the country. But we must not ignore the fact that the Normal School of Science is in its infancy, and may therefore improve with maturity, and that the fact of a biologist being in power for the moment is merely accidental and could scarcely be permanent, since as a subject of technical education applicable to the promotion of our national industries biology is every whit as far outside the limit of utility as theology or metaphysics, or any other speculative or recreative science. Such subjects would quickly be abandoned by any technical school as soon as it acquired sufficient reputation and strength to command recognition as a technical school, so that no trouble need be taken about them. It is technical education as contradistinguished from speculative and theoretical education that our country wants, and this it will have before long from the South Kensington people if they be careful to provide it, or from a body that will annihilate the South Kensington School if the executive thereof ignore the real requirements of our national industries.

Now, a Royal University of Mining and Science could readily be built up out of the South Kensington School, and without conflicting with any existing university or involving any greater cost to the country than is now incurred. At present the South Kensington staff and council are vastly too weak to be able to wield university powers with advantage to themselves or to anyone else; but in the process

of elevating the School to the rank of a university the executive would of necessity be strengthened by the amalgamation of the real technical teaching bodies of the kingdom—without such amalgamation it would, probably, be impracticable to obtain a charter at all—and thus the new University would be a great and useful institution. The South Kensington School would form the nucleus of the University, but the several colleges constituting the University—the Schools of Mining and Metallurgy, the Schools of Civil Engineering, the Schools of Architecture, the Schools of Chemical Science, the Schools of Agriculture, the Schools of Physical Science, and whatever other schools might be found necessary—would each contribute its representatives to the council or senate of the Royal University of Mining and Science, and as these would form the governing body no fear need be entertained that the utilitarian character of the University would be sacrificed to theology, biology, psychology, metaphysics, or any other science not directly applicable to the purpose in view. It must not be supposed that the value of these sciences is ignored, far from it; but it is contended that a technical university is not the place wherein to teach them. That there are conflicting interests is certain; but as all concerned at least profess to have one and the same object in view there must surely be some way of promoting such unanimity as shall ensure the speedy success of the project.

MINING PROGRESS IN CANADA.

Canada is becoming an important field for miners, and the development of her mineral resources from the Atlantic to the Pacific coasts is revealing the fact that emigration to foreign countries by Canadians who desire to engage in mining pursuits is foolish and unnecessary. If prospectors, says the Canadian Mining Review, could be induced to explore the mineral bearing belts of this dominion as carefully and assiduously as those of other countries have been prospected, they would, without question, meet with equally good success as has rewarded the searcher in any other part of the world, and, further, if capitalists in this country were less prejudiced against investing money in mining enterprises at home they would not be so easily persuaded to speculate in wild cat ventures in distant countries, where manipulation and scheming is unblushingly resorted to by operators over whom they can have no control.

There appears to be a disinclination on the part of the wealthy men of Canada to foster and encourage the mining industries of their own country, and the consequence is that foreigners, especially Americans, are piece by piece becoming the owners of our richest mines and mineral deposits, and the profit derived from them finds its way out of the country. For the past quarter of a century mining has been retarded by want of capital to develop the industry, and the numerous valuable deposits long ago discovered have been allowed to remain as Nature formed them, unnoticed and untouched. When capitalists in England, on the continent of Europe, and in the United States were invited to advance money for the development of our mineral resources they quite naturally became sceptical as to the likelihood of such investment proving profitable knowing, as they very well did, that there were wealthy men in the country who had money to invest in anything that would yield fair returns. These foreigners know us better now than they did some years ago, and have discovered that the cause of our mineral wealth having been so long neglected has been due to lack of enterprise on the part of those who possessed the means of developing it.

In Nova Scotia the best paying gold mines have fallen into the hands of Americans, and a large proportion of her coal area is owned and worked by foreigners. In the province of Quebec the richest asbestos mines, with one exception, and some of the best gold mining privileges in the Beauce and Chaudiere districts are controlled by Americans, and all of our richer phosphate mines in the same province are owned by America and English organisations. In Eastern Ontario the gold and iron mines that are now attracting so much attention have become the properties of our enterprising neighbours, or controlled by them, and are being developed with their capital. Those copper mines on the north shore of Lake Superior that are now being worked are owned by English companies, and Silver Islet, from which millions of dollars in profit were derived, was allowed to fall into the hands of American capitalists, and they are rapidly acquiring the most valuable of the mineral locations and mines in the vicinity of the Rabbit Mountain and Huronian. Further westward at the Lake of the Woods and beyond in the Rocky Mountain district Canadians have shown rather more enterprise than elsewhere, and yet even here they would rather sell than work the mines. In British Columbia the mines are owned and worked by people of various nationalities.

A misfortune which has long been felt in this country is that the enterprising Canadian has not the means to advance and develop our mining industries, and the capitalists have not the enterprise to come to his assistance, consequently we have been, and are now depending on capital coming in from other countries, and though it is coming freely, we require much more if justice is to be done to our mineral resources.

MINING EDUCATION IN AUSTRALIA.

The thoroughly practical and liberal constitution of the University of Melbourne has several times been noticed, and the current Melbourne Calendar, with examination papers set for the February term of the present year, with a copy of which we have been favoured by Mr. William Nicholas, the lecturer on Mining, from whom we publish the first of an interesting series of communications in the Supplement of to-day's Journal, leaves no doubt mining and technical subjects continue to receive as much attention as ever in that institution. In the ordinary terminal examinations the undergraduate has to pass among other subjects in chemistry, mineralogy, and botany; in practical chemistry, geology, and palaeontology, surface and mine surveying and levelling, drawing and mapping, mechanical drawing and descriptive geometry, applied mechanics, civil engineering, metallurgy and mining, especial attention being given to the several subjects according to the occupation to which the student intends to devote himself.

As an example of the practical character of the questions that have to be answered, the mining paper set by Mr. Nicholas for the Honor examination of the February term may be referred to. The questions were:—1. Describe how a quartz reef is stoned, explaining how the stopes are ventilated, made secure, and what measures are taken to remove broken quartz from the stopes.—2. Explain how gold usually occurs in quartz reefs of different forms, and with what minerals it is generally associated below water level.—3. Give longitudinal and transverse sketch sections of, and general remarks on, the workings of several important quartz mines in Victoria.—4. Roughly sketch the mode of occurrence of quartz reefs on the Sandhurst and Stawell gold fields, and supply general explanatory remarks thereon.—5. Describe how gold occurs in old river beds, and give examples of the relative positions of auriferous deposits of different ages on several gold fields.—6. Give an outline description of the method of laying out and working a mine on a deep auriferous alluvial lead.—7. Give a descriptive list of the different tools used in mining, and the several operations directly connected with mining.—8. State how you would place pumps and the necessary gear in a deep shaft, so as to drain a mine, and supply sketch diagrams showing the positions of plungers, cisterns, clacks, door-pieces, drawing-lift, set off, &c.—9. Describe a set of timber for a shaft, for a level, and for blocking out (showing the joints by special sketches).—10. Describe apparatus for preventing cages or tanks falling down shafts after overwinding.—11. Explain the tribute system of mining, and under what circumstances it might be advantageously adopted. And it is noted that illustrative sketches and measurement will enhance the value of the answers.

The thoroughly practical character of these questions cannot be doubted, and although it might be objected that some of them are rather local than general, it must be remembered that in a colony students are not expected to migrate in order to find profitable employment in their profession, and that it is, therefore, of paramount importance that they should above all things have an intimate acquaintance with the geology and mines of their own district. That the university has proved of immense benefit to the colony in encou-

raging and controlling the higher education is acknowledged by the whole community, and the good work which it is now doing for mining and technical education is beyond dispute.

MINERAL RESOURCES OF MEXICO.

As public attention is being directed to this country for its silver mines a few extracts from an article in the New York Sun of May 18 may be interesting. Speaking of the mode in which the railway was constructed the writer says—"One thing was noticeable everywhere, and especially upon that part between Zacatecas and the City of Mexico—that much of the earthwork was done by the Indians, who carried the materials in baskets or sacks on their heads and backs, instead of in wheelbarrows. Indeed, it is said that they carried the first wheelbarrows and their loads on their heads also, and that they never became entirely reconciled to the usual way of using them." The writer then states—"Northern Chihuahua must depend upon the silver mines which are said to abound in the Sierra Madre.

Chihuahua, the capital of the State, owes its existence to the proximity of the Santa Eulalia and Cusihuiriachi Mines, from which immense quantities of silver have been taken in bygone times. The miners are now owned by American companies, working with improved machinery and new methods, and bid fair to become famous again, and to bring back to Chihuahua the prosperity of other days. The population of the city is said to be 18,000 or 20,000, composed almost entirely of Indians, all of whom are directly or indirectly dependent upon mining for their support. The houses are generally of one storey, and all of adobe or sun-dried brick, because there is absolutely no timber, but many of them are stuccoed and whitewashed. The cathedral, built many years ago, is an imposing structure of stone and is said to have cost \$800,000, collected by a tax of seven cents upon every eight dollars worth of silver mined in the neighbourhood.

Zacatecas, the capital of the State of Zacatecas, is the first city of any importance on the line of the road south of Chihuahua. It is 787 miles from Passo del Norte, and is one of the oldest and most important mining cities of Mexico. It is an arid, mountainous region, over 8000 ft. above the level of the sea, and is surrounded on all sides by mines and benefitting (or reducing) works, called haciendas, which, according to local account, have yielded \$1,000,000,000 worth of silver in the last 350 years, and are now turning out over \$5,000,000 a year. From the excellent condition of most of these mines and works, it is evident that they are strongly held, and that silver mining, at least, is a thoroughly organised, legitimate business. Four mines in the region are said to be yielding a fair profit. This information is especially important to our English company (the North Mexican Silver Mining Company), as that company acquired the principal part of the Cusihuiriachi Mines.

CORNISH MINE SUPPLIES.—After the meeting at West Frances, on June 12, Mr. Reuben Carne (an adventurer for 32 years) intimated that at the next meeting he should move that the supply of materials should be open to tender. As a merchant he could supply iron much cheaper than he saw in the bills. Coals were charged excessively, as also was timber. In paying his money in calls he should take care he had fair play. Mining was in a very depressed state. He knew the price of materials, and he was not going to permit the merchants to eat their tins up entirely. And these accounts should be laid upon the table two hours before the commencement of the meeting. He noticed that coals had been charged 19s. per ton. It was astonishing what coals might be obtained for in Wales at the present time. Mr. Taylor used to keep West Tolgas going with coals for 13s. per ton, and they were paying 17s., 18s., and 19s. per ton. Did he not know the subject of which he spoke should be like other dummies in considering the question.—Mr. Trounson said that such charges as those made by Mr. Carne were not rare. The character of Mr. Carne had been especially spoken of for that gentleman's truthfulness and honour, and they must recollect that he was one who was connected with the trade. He did not believe in a monopoly in the matter of the supply. It was most damaging to their mining interest. If merchants owned ports, and did not allow others to make use of those ports, such a practice was against the county. The manner in which the privileged merchants supplied the mines was one of the curses of Cornish mines. But he had reference to the suggestion that Captain Thomas's hands were tied, in some instances, in mines. He severely condemned the keeping back of the real debts of a mine—inasmuch as they had instances which told seriously against those who entered a mine not being aware of the actual indebtedness of the shareholders. He complained that Cornish mining was conducted at present on a far from reputable way.

THE TANKERVILLE MINERS.—Referring to the present position of the men thrown out of employment by the stoppage of the Tankerville Mines a correspondent (Minsterley, June 19) writes:—The Tankerville Great Consols miners are still without the money due to them. We have heard that there was a test case entered into the County Court at Welshpool, but that the liquidators have induced the parties to withdraw it, so that it is thought that they see their way clear to pay the wages in full; and we hope it will be soon, for many families are badly off and likely to be worse, if their wages are not paid soon. Some of the tributaries' ore that was down in the shaft when the works stopped is now being drawn to surface and is to be cleaned forthwith, and the ores sold, and the moneys thus realised will be paid to the men. The landowners of these mines still say that they have done all they could to encourage the company to carry on the works. The Snailbeach Company had a meeting on the mine on Tuesday, and it is stated that the old mine looks well in the deepest workings.

ROYAL METEOROLOGICAL SOCIETY.—Among the papers read at the concluding monthly meeting on Wednesday (Mr. R. H. Scott, F.R.S., the President, in the chair) were: "The Equinoctial Gales—Do they occur in the British Isles?" by the President. The period investigated was the 14 years 1870-1884, and only those storms were selected which had attained force 9 of the Beaufort scale at more than two stations. The results show that the storms are all but exclusively confined to the winter half-year; and also how, for a certain interval, the stream of storm depressions set over the British Isles, and then for a time takes another path, leaving this country at rest. In some years there are as many as four or five storms in a fortnight, and in others there are none or only one. It is further shown that there is no strongly marked maximum at either equinox. The Hon. R. Abercromby, in discussing the "Physical significance of Concave and Convex Barographic or Thermographic Traces," showed that a falling barogram is convex when the rate of the fall is increasing, concave when decreasing; and conversely, that a rising barogram is convex when the rate is decreasing, concave when increasing. As the rate of barometric change is proportional to the steepness of the gradients which are passing, and the wind also depends on the gradients, the author suggests the following rules for judging the coming force of a gale from the inspection of a barogram: A convex barogram is always bad with a falling barometer, and good with a rising one, and a concave trace is sometimes a good sign with a falling barometer, and not always a bad indication with a rising one. The convexity or concavity of thermogram is likewise shown to depend on the rate of thermal change. A method is given by which the distribution of diurnal isotherms over the globe can be deduced from the diurnal thermogram in different latitudes, and it is shown that the shape of diurnal isotherms on a Mercator chart, for a limited number of degrees of latitude, is similar to the shape of the curve of diurnal temperature range if we turn time into longitude and temperature into latitude on a suitable scale. Papers were also read on "The Helm Wind," by the Rev. J. Brunskill. This is an account of a wind peculiar to the Crossfell range, and its presence is indicated by a belt of clouds, denominated the "helm barr," which settles like a helmet over the top of the mountains. And on the "Climate of the Delta of Egypt in 1798 to 1802 during the French and British Campaigns," by Surgeon-Major W. T. Black. The author has collected and discussed the meteorological observations made in Egypt during the French and British campaigns at the beginning of the present century.

RUSSIAN INDUSTRIES—PETROLEUM, COAL, AND IRON.

In the earlier period of Russian rule the opening of the Caucasus to foreign trade formed one of the substantial means of attracting capital and enterprise to explore and develop the local natural resources; and in the face of an economically helpless population, lack of local production, industries, and trade, it was urged, as a matter of expediency, to further by all possible means a transit trade over this Caucasian isthmus, forming, so to say, a bridge connecting European and Asiatic markets. Such in general terms were the views of General Yermoloff, Prince Vorontsoff, and their successors, who at different periods were placed at the head of affairs in the Caucasus; and, says Vice-Consul Peacock, writing from Batoum, it cannot be denied that whilst enjoying the privilege of a free transit the country has been attaining a marked degree of industrial and commercial progress. The Trans-Caucasian railway line was actually projected on the ground of the then increasing transit business; for it was well understood at the time that the domestic trade was much too insignificant to justify so enormous an outlay as was required for the construction of a line above 550 miles long. But it so happened that at the very time the line was completed and opened the transit was ordered to be closed. Taking the yearly returns of transit for the last few years, the average quantities and values were found to be 6600 tons—900,000^{r.} yearly. The direct loss of this item naturally leaves a gap in the local traffic; but the transit business was so fully interlaced with other branches of trade, shipping, and forwarding operations, that its sudden abolition affects also indirectly the commerce of the country at large.

The only produce that may be added to the list of exports as a new article of trade on this coast, and that at once outstripped all other branches of commerce, is the Baku petroleum. With reference to the official returns of exports and imports relating to this port for the year 1883, it must be remarked that in reality they show only the volume of the latter six months of the year, inasmuch as before the opening of the Trans-Caucasian Railway the bulk of the traffic was still directed to Poti, not Batoum. Even under present conditions, and notwithstanding its open and dangerous roadstead, Poti maintains a marked share in the import, and especially the export trade of the country. The exports of coal produce to foreign countries showed a marked increase in 1883, the total value of exports being 261,400^{r.}, against only 32,300^{r.} in the preceding year. The principal items of the class mentioned were—Kerosene, 78,156^{r.}; lubricating oil, 21,759^{r.}; mineral oil, 11,288^{r.}. Large quantities of maize, also timber, manganese, raw cotton, &c., were shipped at Poti, there being no adequate accommodation at this port to receive and store the bulky raw produce of the interior. With regard to local industries, it is worth mentioning that in connection with the petroleum trade, regular factories of tin cans have been established here, and that the repair of old casks also occupies a considerable number of hands. Tin cans are being prepared by thousands daily, under contract, at 10d. per can holding five gallons of petroleum; and wooden casks are sold at the rate of from 8d. to 10d. per five gallons of liquid. The transporting and carrying of merchandise from the railway station to the quay, and vice versa, occupies hundreds of carriers and 320 teamsters. A great many hands and lighters are also employed in the shipping operations at this port. It must be observed that all these signs of activity with reference to local industries and trade are principally due to the growing petroleum trade. The port charges consist of a tonnage duty of 10c. per last, or 1d. per ton. There is no pilotage, anchorage, or light dues. Vessels submitted to quarantine have to pay an extra charge of 2c. per last, or about 1d. per ton for entrance and 1c. per last or 1-32d. per ton for every day whilst placed in quarantine.

It appears to be not improbable that Balaklava will again become familiar to the ears of Englishmen, though this time under more friendly circumstances. The hitherto unimportant town of Balaklava is, says Vice-Consul Harford, of Sebastopol, beginning to develop resources, and bids fair to become a fashionable resort for invalids. A medical commission visiting it last summer has, it appears, reported very favourably on its sheltered position and climate. An enterprising Frenchman has determined to utilise the sardine fishery, and has established buildings for the preparation of the fish and the manufactory of the boxes; and coal has been discovered in the neighbourhood, though as yet it is not known in what quantity. This report will probably lead to the employment of capital, and consequent advantage to the town. The derivation of the name Balaklava has been attributed by some historians to a corruption of Palakion, one of three fortresses said to have been built by the Scythian King of Scylurus, and by others to Bella Clava (fine port). The following extract from an old Polish work of the sixteenth century will, consequently, perhaps be deemed interesting, as deciding the question. The book is entitled "Chronicles of Poland, Lithuania, and Southern Russia," by Osostorius Stryjkowski; printed at Kralowice (now Konigsberg) by George Osterberger in the year 1582:—"Chapter XV.: Of the defeat of the Khan Balaklava in 1221 by General Skirmont. Balaklava, the most powerful Khan of the Transylvanian Horde, who levied tribute from all the other tribes in consequence of the discord prevailing amongst the Russian princes, this day acknowledged the sovereignty of the Grand Duke of Moscow from the Caspian Sea to the Black Sea. Here, in a wild country, he had built himself a castle which he called Balaklava, and this can be truly known, for the castles of Balaklava, Tchopchapski, Oslani, and others are still standing." It is to be regretted that the author does not quote his authority; but there can be little doubt that the wild country was the Crimea, and that Balaklava derives the name from the Khan's castle, on the ruins of which the Genoese in 1357 built their fortress. In corroboration of this is the fact that ruins of a much earlier period than the Genoese are still to be seen on the hillside, and that in the vicinity of Simeis, on the south coast, there are ruins still called by the Tartars Tchopchapskoi; and although it is known that the Genoese called Balaklava Cembalo, the old name was no doubt preserved by the Tartars, who to this day call Sympheropol and other towns in the Crimea by their Tartar names.

As some attention has recently been directed to Russian Customs regulations, in consequence of the attempt to exclude foreign agricultural machinery from the country, it will be interesting to learn something concerning the position of that trade at present. Referring to the trade and commerce of Taganrog and Rostoff-on-Don, Consul Wooldridge states that the imports of finished and rough iron and other metals fell short of those of 1882, but those of agricultural machinery comprised 5220 sets of all descriptions. The English firms exporting machinery to these parts are Clayton and Shuttleworth, Ransomes, Head and Jeffries, Howard and Bentall, Baker, Corbett, and Marshall and Sons. The American machinery is provided by Johnston, Buckeye, Hollinsworth, John Dier, and Hosier; the German by Eckart, Epple, Long, and Meyer, and the Austrian by Clayton and Shuttleworth. The agents at Taganrog are Palmer and Bell, Turner, and Betolinski (Marshall and Sons)—this last does a large business; and at Rostoff, Riedell and Bowman, John Martin, Hill, Blanchard and Co., and William Graham. Competition is much increasing in the market, and agents get what profit they can. Sometimes they sell at cost price in order to get rid of stock, and sometimes they make 20 per cent. profit. The Caucasus takes the greater part of the machinery sold, and machines which find the best sale are the steam-threshing machines of Clayton and Shuttleworth, the ploughs of Ransomes and Eckart, and the American reaping machines of Johnson. A few string binders have been sold, where the land is even and a mechanic employed. As yet they are too dear for peasants, and the machinery too complicated. There has not been a ready sale for horse hayforks and chaff-cutters. Winnowers are the only machinery at present made at Rostoff, the price ranging between 50 and 100 r. The steam threshers are general imported by way of Libau and Riga. Russia cannot, in Mr. Wooldridge's opinion, compete with foreign machinery, at least, for the present, either in durability or quality. The poor and needy farmers and peasants, unable to purchase foreign articles, still have recourse to the country ones, which seem to satisfy them, being one-third the value. He thinks some simpler and cheaper kind of reapers might be manufactured abroad to suit better the means of the peasants, and which might be provided with the appliances for saving labour, which no doubt would find ready sales. As in other things in this world, reaping and other machines

should be expressly made for the impecunious and thrifty as well as for the well-to-do. Plates for shipbuilding and repairing, and for boilers, were received at Rostoff from Moscow during the year 1883. The domestic trade is improving, if one may judge by the handsome shops in these towns stocked with country goods, and by the expensive decorations and furniture.

Public works are not in a highly developed condition, for beyond the completion of the paving of the main street, which was a most necessary work, there is nothing new to be recorded under this heading. Certain proposals and schemes have been introduced and discussed, such as the cutting of a canal through the isthmus of Perekop, at a cost of 40,000,000 r., but traffic is not sufficiently developed to warrant the expense; and although the water on the Azoff side of the isthmus is sufficiently deep to allow vessels to approach the land, on the Black Sea side it is very shallow for miles from the visible land. The success of such a work would be favourable to the coal trade between Taganrog and Mariupol, and Odessa and Sebastopol. Forts would have to be erected also, but one would think that the first attempt at direct communication between Odessa and Taganrog would be by means of a railway. The local industries of Taganrog have simply maintained the *status quo*. Wages of labourers have not advanced in scale, strikes being unknown, and the state of the domestic market not having pressed off their means. The price of coal for domestic purposes has been the same—15 and 16 c. per pood delivered at the door—but that of wood rose slightly, and there is every prospect of a yearly increase in the price, considering the enormous consumption and the decreasing supply. The principal industries at Rostoff carried on with success during the year have been—the tobacco factories of Asmoloff and Kyniaroff, which employ over 2000 hands daily; the flour-mills; the paper-mills (Pachenko), employing 200 hands daily; the mechanical and engineering shops and foundries, increased by two, employing altogether 675 hands; the nail factory, 30 hands; a locomotive workshop, 200 hands; the Volga Don factory and slip, 150 hands, which has at the present moment on the stocks two steamers building—average wages being 1 r. 50 c. per day, man and boy. There are also three breweries, a French company of gasworks, and a French company of waterworks.

The coal and iron industries and the railway system in the valley of the Donets are showing very fair progress. The official estimate for the year 1883 of the output of coal in the Donets Valley, a territory of about 180,000 square miles in extent, was 166,000,000 poods. Through this district a system of railway winds, having stations near the principal collieries, of which there are about 100 working. At Grushefska, about 50 miles to the north of Rostoff, are the Azoff Coal Company Mines, the coal being anthracite. Situated outside the village is also the mining establishment of the Russian Steam Navigation and Trading Company, which has the monopoly of the Black Sea coal trade. At the Azoff Coal Company there are two shafts working, the third having ceased. These shafts are connected underground, and about 250 miners are at present employed in them night and day. The manager and foreman are Englishmen, but the labourers are Russians, with the exception of a few Italians and Germans. The oil lamps used in the pits are uncovered, there being no danger from gas in anthracite collieries. The men are paid according to the quantity of work done. Only between 5000 and 6000 poods are put out during the 24 hours, though as much as 16,000 poods might be put out when times are good. This company has lately lost one of its chief customers in the Gras-Tsaritsin Railway, which has given over burning anthracite, and is using exclusively "refused" petroleum. The prices of anthracite coal at the pit at the end of 1883 were:—For large coal, first quality, 10½ copecks per pood; second quality, 10 copecks per pood; small coal, 5½ copecks per pood; and for a wagon load of 800 poods delivered at Taganrog 75 r., 72 r., and 70 r., respectively.

A mechanical workshop is attached to the colliery, and turns out all that is necessary for repairing its own machinery, and also does the work of its neighbours. The machinery is English, and has worked for years most satisfactorily. A Government tax of ½ c. is imposed per pood of coal taken out if machinery is employed, and of ¼ c. where there is no machinery. Accidents are rare, and never occur from explosions. The second seam is now being worked, and is about 2 ft. 4 in. in thickness, and is 308 ft. from the surface. At Hugheska, or the establishment of the New Russia Company, there are over 100 English miners and artisans, and about 3000 Russians employed in the pits and at the foundry and shop. About 500 steel rails are manufactured in the 24 hours. Wages of the workmen average 60 r. per month, there being a monthly expense of about 160,000 r. A hospital, dispensary, and lavatory are attached to the works. Coke is manufactured outside the village. The coal is, unlike the Grushefska coal, soft and charged with much combustible matter, and good sales are found for it, as well as for rails and pig-iron. The price of pig at the works is 70 c. per pood, and delivery at Rostoff and other places 80 c. English pig, which is superior to that of the New Russia Company, costs 1 r. 10 c. per pood at Rostoff.

British labourers contract for three years, and most of them have renewed their contracts, being perfectly satisfied. Many of them are married to Russian women, and have settled down on the steppe. Boys are employed at light labour. The Russians are engaged by the year, and they are reported to be excellent workmen. There are three blast-furnaces working, each producing 140 tons of iron per week, the oldest having been lately repaired after 11 years of continual usage. Ten years ago but two pits were working, each producing 100 tons of coal in 24 hours. At present there is another, producing 120 tons per day, and two larger pits, each producing 500 tons per day, all worked by steam-power, and the pits now produce an aggregate of 1,000,000 poods of coal per month. The depth of the deepest shaft is a little over 430 feet. The water supply is abundant, and is maintained in underground reservoirs. Many difficulties had to be met with and overcome with regard to the native labourers, who were willing enough to work in the winter months, but refused to do so in the summer months, and deserted for agricultural labour. Ordinary brickmaking from fine clay is carried on sufficiently large to meet all requirements for building, as well as fire-bricks for the furnaces, and the hearths are made from a fire-resistant stone found in the neighbourhood. A branch line connects the works with the nearest station on the Constantinofka-Marlop line. The coal pits are close to the works, but the iron mines are situated some 20 miles away. Manganese ore, for smelting, is imported at much cost from the Caucasus.

METALLURGICAL PROGRESS IN WURTEMBERG.

The iron and steel trade remained much in the same condition in 1883 as in the previous year, but Mr. Conyngham Greene gives some interesting details concerning the manufacture of machinery. In this branch of trade Stuttgart alone gives employment to about 4000 hands, and manufactures every sort of mechanical appliance, including engines, agricultural implements, sewing-machines, metal, wood, and paper machines, and so on. The export increases year by year, and one-third of the articles manufactured are sent out of the country. The largest establishment in the kingdom is the Royal Machinery Manufactory, at Esslingen, with a yearly production of goods to the value of 7,000,000 marks (350,000^{r.}), and a large export sale. This great establishment employs 1700 men, and has, since its foundation 36 years ago, exported 2000 locomotives with tenders, 6000 passenger, goods, post, and tramway carriages, 1200 iron bridges, sheds, roofs, 600 boilers, &c., besides a large number of steam, hydraulic, and other mechanical appliances of all sorts. Among the artistic branches of the metal industry may be mentioned the manufacture of fancy articles in solid brass, such as lamps, candlesticks, inkstands, and objets d'art of all sorts, which are of excellent workmanship and of extraordinary cheapness as compared with the prices of similar articles in England.

The gold and silver industry shows little advance upon the results of the previous year, which was one of tolerable success. Complaints are made that no measure has as yet been passed by the Reichstag to fix a standard for the quality of gold and silver, the result being that the manufacture of articles of little or no value increases daily, to the detriment of the trade generally. The Chamber of Commerce of Heilbronn complain bitterly of the duties upon silver-plate and table accessories in England, which amount to a complete exclusion

of German wares from the English market, and demands an abatement of the import duty by at least 5 per cent. on the value. The same Chamber states its conviction that the trade with England would, under more favourable conditions, be no inconsiderable one, and declares that both in style and skill the home workmanship has made a remarkable advance upon that of English manufacturers. It must, however, be observed in reply, that both in respect of style, workmanship, and finish of their jewellery and plate, the manufacturers of this country cannot be said to compare favourably with those representing English firms.

ANGLO-AMERICAN MINING ENTERPRISE.

Although many British capitalists complain that the dividends which they have received upon their investments in the mines of Colorado, Utah, Missouri, and neighbouring States of the Great Republic, have not been so large as to encourage further speculation in the same direction it is felt that much of their disappointment is due to their having failed to obtain so true report upon each of the several properties in which they have invested as the subjoined, which refers to the mine of Mr. William Nye, now offered at the bed-rock price, and which it is claimed is likely to turn out as valuable, in a commercial sense, as the Old Telegraph, Flagstaff, Emma, or any other of the great and prosperous mines now in such high favour with the European public. The report, as made by the owner himself, and published in the Colorado Mining Gazette, says:—I have decided to sacrifice another valuable piece of mining property this spring. It would not be sold if I had the necessary capital to develop it. It is a good mine, for I located it myself. I remember well the day I climbed up on the ridge-pole of the universe and nailed my location notice to the eaves of the sky. It was in August that I discovered the Vanderbilt claim in a snow storm. It cropped out apparently a little south-east of a point where the arc of the orbit of Venus bisects the milky way, and ran due east 80 chains, three links of sausage and a half to a fixed star, thence north across the lead of place of beginning.

The Vanderbilt set out to be a carbonate deposit, but changed its mind. I sent a piece of the cropping to a man over in Salt Lake, who is a good assayer, and, though not a professor, quite a scientist, if he would brace up and avoid humour. His assay ran as follows:

Salt Lake City, U.T., Aug. 27, 1877.
Mr. BILL NYE.—Your specimen of ore, No. 35,532, current series, has been submitted to assay, and shows the following result:

Metal	Ounces	Value per ton.
Gold	—	—
Silver	—	—
Haird-iron	1	—
Pyrites of poverty	9	—
Parasites of disappointment	99	—

Note.—I also find the formation is igneous, prehistoric, and erroneous. If you would sink a prospect shaft below the vertical slide, where the old red brimstone and predate ring cross-cut the maficite and intersect the schist. I think that would be about as good as anything you could do. Then send me specimens with \$2 for assay, and we shall see what we shall see.

McVICKER, Assayer.

Well, I did not know he was a humourist, you see, so I went to work on the Vanderbilt to try and do what Mac. said. I sunk a shaft and everything else I could get hold of on that claim. It was so high that we had to carry water up there to drink when we began, and before fall we had struck a vein of the richest water you ever saw. We had more water in that mine than the regular army could use. When we got down 60 ft. I sent some pieces of the pay streak to the assayer again. This time he wrote me quite a letter, and at the same time enclosed the certificate of assay.

Salt Lake City, U.T., Oct. 3, 1877.

Mr. BILL NYE.—Your specimen of ore, No. 36,132 current series, has been submitted to assay, and shows the following result:

Metal	Ounces	Value per ton.
Silver	—	—
Stove polish	trace	·01
Old grey whetstone	trace	·01
Bromide of axle-grease	stain	—
Coppers	trace	5c. worth
Blue vitriol	trace	5c. worth

McVICKER, Assayer.

In the letter he said there was no doubt something in the claim if I could get the true contact with kalsomine walls denoting a true fissure. He thought I ought to run a drift. I told him I had already run adrift. Then he said to stop out my stove polish ore and sell it for enough to go on with development. I tried that but capital seemed coy. Others had been there before me, and capital bade me soak my head, and said other things which grated harshly on my sensitive nature.

The Vanderbilt Mine, with all its dips, spurs, angles, variations, veins, sinuosities, rights, titles, franchises, prerogatives, and assessments is now for sale. I sell it in order to raise the necessary funds for the development of the Governor of North Carolina. I had so much trouble with water in the Vanderbilt that I named the new claim the Governor of North Carolina, because he was always dry.

AMERICAN IRON AND STEEL ASSOCIATION.

The statistics of the American and Foreign Iron Trades for 1883 contained in the annual report of the secretary of the American Iron and Steel Association is as usual interesting and exhaustive. Mr. JAMES M. SWANK continuing indefatigable in thoroughly utilizing the advantages of his position to secure accuracy and completeness. Referring to 1883, he remarks that all in all the year is not one to be pointed to hereafter as one of general disaster to our iron and steel industries, nor of panic, nor of overloaded markets, nor of serious decline in consumption, nor of sudden collapse in prices; but it was, nevertheless, a year of only moderate prosperity, even of less prosperity than its predecessor had brought, and as such it must pass into history.

With the close of 1883 the decline in the prices of iron and steel was partially arrested, and the quotations of December have since been slightly reduced in some lines and in others have been fairly steady. The demand since Jan. 1 has, however, been sluggish, and indications point to an aggregate production of iron and steel in 1884 that will be less than that of 1883. The demand for steel rails, and for iron and steel for cars and locomotives and for bridges and other structural purposes, is less than it was a year ago, and probably less than it was six months ago. The shrinkage in railroad building, which will be more marked in 1884 than in 1883, must correspondingly affect the consumption of heavy iron and steel products. It is perhaps too soon to estimate closely the effect in 1884 of the existing business reaction upon the minor uses of iron and steel—upon the consumption of hardware, tools, and implements of all kinds, machinery, stoves and other castings, wire for fencing, wagons and carriages, &c.; but it is significant that the farmers, who consume fully one-half of all the iron and steel that is not consumed by the railroads, have a large surplus of last year's grain crop still on hand, and that, in consequence, the price of wheat has recently been lower than at any time since 1878, while the prices of other agricultural products have also declined. If the prices of wheat and other agricultural products are exceptionally low the demand for iron and steel for the uses of the farm cannot be large.

There is, however, a more hopeful view. The minor uses of iron and steel in this country, with its population of fifty-eight millions, require even in dull times a large aggregate tonnage of pig-iron and of iron and steel in other primary and secondary stages of manufacture, and these minor uses are naturally extended with an increase in population. Not even low prices for wheat can destroy them or entirely arrest their extension.

C. E. HALL, MEERSBROOK BANK,

SHEFFIELD.

Makes a Specialty of the following Machinery suitable for Mines, Collieries, &c.:-

THE "MULTIPLE ACTION" CRUSHER.

THE PATENT SECTIONAL CRUSHER in STEEL and Cast Iron for FOREIGN TRANSPORT.

THE EXCELSIOR ELEVATOR AND CREEPER.

THE ECLIPSE DRIVING CHAINS, instead of Gearing and Belting—POSITIVE DRIVING.

THE UNIVERSAL PULVERISER, for reducing Ores, Quartz, Lime, Phosphates, Cement, &c.

PATENT CORNISH CRUSHERS, with Hall's Patent Universal Tension Springs, instead of Levers and Weights.

Coal Washing and Dressing Machines for Coke Making.**THE SMALL COAL IS DRIED AS IT PASSES OFF THE MACHINE.****Wet Coal Grinding Machines, Coal and Slack Elevators, &c.**

Write for Catalogues.

M R. JOHN L. M. FRAZER,
CONSULTING MINING ENGINEER,
(21 years' practical experience).**GREENFIELD'S, WREXHAM.**

UNDERTAKES the MANAGEMENT OF MINES on such reasonable terms as to save shareholders a large sum annually.

SUPPLIES THE BEST MACHINERY FOR PUMPING, WINDING, AIR COMPRESSING, and DRESSING ORES, &c., at unusually low prices.

WM. BREDEMEYER,
MINING, CONSULTING, AND CIVIL ENGINEER,
56, EAST FIFTH SOUTH STREET,
SALT LAKE CITY, UTAH.

United States Mineral Surveyor for Utah and Idaho, Notary Public, Geologic Examinations, Reports on Mining Properties; Surveys Mines, Railroads, and Canals, and Superintends the Workings of the same. Prepares Estimates and Plans for Opening and Working Mines. Expert on Mining Questions before the Courts.

Address, P. O. Box, 1157, Salt Lake City, Utah.

ALEXANDER SMITH, M. Inst. C. E., CONSULTING ENGINEER AND VALUER OF IRONWORKS, MINING, RAILWAY, ENGINEERING, and other PROPERTY, PLANT, and MACHINERY, PRIORY STREET, DUDLEY,

4, BURLINGTON CHAMBERS, NEW STREET, BIRMINGHAM.

Mr. SMITH has been retained for nearly 20 years by some of the most prominent firms, and has conducted many of the largest valuations that have taken place in the kingdom.

Valuations for Stock Taking or any other purpose upon very reasonable terms.

THOMAS CORNISH, CONSULTING MINING ENGINEER.
Mines Inspected and Reported on. Advice on Mining Management and Investment.**Twenty-five years' practical experience in Australia.**

Author of "Gold Mining: its Results and its Requirements" "Our Gold Supply: its Effects on Finance, Trade, Commerce, and Industries"

"A Trip to Colorado," &c.

Address, care of MINING JOURNAL Office, 26, Fleet-street, London, E.C.

JOHN ROBERTSON, F.S.A., MINING AND CONSULTING ENGINEER, LAS VEGAS, NEW MEXICO.

Mines and Mining Claims carefully examined, Assays made of their Ores, and reliable Reports furnished.

Mining Properties bought and sold on commission. Has special facilities for inspecting properties in Mexico.

References by permission:—L. P. BROWNE, Esq., Las Vegas, New Mexico; Don F. A. MANZANARES, Las Vegas, New Mexico; His Excellency H. M. HOYT, Ex-Governor of Pennsylvania, Harrisburg, Pa.; H. S. FIERCE, Esq., Banker, Scranton, Pa.; Hon. JOHN HANDLEY, President Judge 45th Judicial District, Scranton, Pa.; N. H. SHAFFER, Esq., Cashier Third National Bank, Scranton, Pa.; E. B. STURGES, Esq., Attorney-at-Law, Scranton, Pa.; E. W. WESTON, Esq., General Agent Delaware and Hudson Canal Company, Providence, Pa.; Hon. Sir JOHN F. CLARKE, Baronet, Tullieprone, Aberdeenshire, Scotland; R. L. CHANCE, Esq., Birmingham, England; JOSEPH ROBERTSON, Esq., 17, Tokenhouse-yard, London.

MINING ENGINEER.**ALEX. DEL MAR,**

Mining Engineer, late Director of the United States Bureau of Statistics, Mining Commissioner for the United States Monetary Commission, &c.

120, SUTTER STREET, SAN FRANCISCO.

Cable Address: "Delmar, San Francisco."—Branch Office: 61, Broadway, New York.

References: The London, Paris, and American Bank, Limited, 9, Tokenhouse Yard, Lombard-street, London, E.C.

ALEX. KERLY, Esq., 14, Great Winchester-street, London; and numerous others.

SILVER MEDALS AWARDED AT CORNWALL POLYTECHNIC 1872 AND 1876.

THE WELL-KNOWN PATENT SELF-ACTING ORE DRESSING MACHINERY, as in operation at most of the large Mines in the Kingdom and Abroad, is now supplied solely by THE PATENTEE AND MANUFACTURER, MR. GEORGE GREEN Mining Engineer, AT GREATLY REDUCED PRICES also all descriptions of Mining Machinery, including GOLD AND SILVER AMALGAMATING MACHINERY, complete Stamp Mills, Water Wheels, Steam Engines, &c.

ROLLER SHELLS FOR CRUSHING MILLS—a specialty**SPECIAL DESIGNS FOR EXPORT AND DIFFICULT TRANS**

Prices and particulars on application to the Manufactory ABERYSTWITH, SOUTH WALES

SUMMER TOURS IN SCOTLAND.**G LASGOW AND THE HIGHLANDS.**
ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS. Royal Mail Steamer COLUMBA for IONA, from GLASGOW daily at Seven A.M., and from GREENOCK at Nine A.M. In connection with Express Trains from London and the south, conveying PASSENGERS for OBAN, PORT WILLIAM, INVERNESS, LOCHAWAY, SKYE, GAIRLOCH, AFFA, IONA, GLENCOE, ISLAY, STORNOWAY, &c. Official Guide, 2d.; Illustrated, 2d. and 1s. by post; or at W. H. Smith and Son's Railway Bookstalls. Time Bill, with Map and Fares, free from the Owner, DAVID MACBRAYNE, 119, Hope-street, Glasgow.**FELTEN & GUILLEAUME,**
MANUFACTURERS OF
IRON AND STEEL WIRE,
Round and Flat Wire Ropes,
OF ALL DESCRIPTIONS FOR
MINING, INCLINES, SHIPS' RIGGING, TOWING, HAWSERS, &c.**W. F. DENNIS AND CO.,**
(Sole Agents for Great Britain),

101, LEADENHALL STREET, LONDON, E.C.; MIDLAND BUILDINGS, 1, NEW STREET, BIRMINGHAM; AND 3, TOWER CHAMBERS, WATER STREET, LIVERPOOL.

Messrs. FELTEN AND GUILLEAUME
MANUFACTURE MINING and OTHER ROPES with the wire forming the strands laid either to the right or left hand, and the strands forming the rope laid in the opposite direction, or having the strands laid up into the rope same lay as the wire in the strand as the customer may prefer. Ropes of the latter construction have been recently patented; but Messrs. FELTEN and GUILLEAUME, having manufactured ropes on this system for upwards of 40 years, are prepared to supply such ropes, and guarantee the purchaser against any liability for infringement of the patent referred to.In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH HERODSFORT MINING COMPANY.
FOR SALE, ONE 24 inch cylinder ROTARY ENGINE, 7 feet stroke, with fly wheel and iron cage, and one 10 ton boiler, at the North Herodsfot Mine, near Liskeard.

Applications respecting the same to be made to the Registrar of the said Court at Truro.

HODGE, HOCKIN, AND MARRACK, Truro.

(Solicitors having the carriage of the proceedings in the said Matter.)

Dated Registrar's Office, Truro, 12th June, 1884.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the POLOSO MINING COMPANY.

TO BE SOLD, under the direction of the Registrar of the said Court, on THURSDAY, the 26th day of June instant, at and after half past Ten o'clock in the forenoon, at the Poloso Mine, in the parish of Breage, within the said Stannaries, in One or More Lots, as shall then and there be determined in, and subject to such conditions as shall be then and there produced, all that the INTEREST of the said COMPANY in the SETT or LICENSE under which its mining operations have been carried on, together with the whole of the

MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS,

At, upon, and within the said mine, including—

ONE 40 inch cylinder PUMPING ENGINE, with two 10 ton boilers, one 32 inch cylinder single rotary engine, with two 10 ton boilers, two large fly wheels, three 16 heads stamp axle, and one 12 head ditto, and 50 stamp heads and lifters complete, 16 inch horizontal winding engine and cage, 20 fathoms 1 inch steel wire rope, 100 fathoms $\frac{3}{4}$ inch ditto, 20 fathoms $\frac{1}{2}$ inch chain, 100 fathoms $\frac{1}{2}$ inch capstan, chain, shears, balance bob, calculator, one 3 feet 13 inch pump, thirty-five 9 feet 11 inch pumps, thirteen 9 feet 10 inch pumps, eight 9 feet 12 inch pumps, one 6 feet 12 inch matching, one $\frac{3}{4}$ inch 12 inch pump, one 11 feet 13 inch polecase, one 12 feet 12 inch pole case, one 10 $\frac{1}{2}$ feet 13 inch pole case, one 12 and one 13 inch top door plies and door, one 12 inch and one 13 inch H-pieces and door, two 12 inch stuffing boxes and glands, one 12 inch door piece and door, two 12 inch and one 13 inch 6 feet windores, two 13 inch seatings and two others, eight pieces 10 inch wood rods 300 feet, three pieces 8 $\frac{1}{2}$ inch wood rods 118 feet, wood fend off, bob Bishophead socket piece and straps complete, 22 pairs rod plates, one pair rod plates with eyes, four wrought iron caps, one iron yoke, one large iron kibble, 80 fathoms 4 inch wood air pipes, 100 fathoms launders, 36 inch bellows, anvil, vice, mandrel, crane, one 3 feet 16 inch shaft roll, 26 new stamp heads 4 cwt. each, 11 $\frac{1}{2}$ inch iron bucket rods, four 10 inch and four 8 inch buckets, one 12 feet 3 inch side screw, new and old iron, lifting jack, 100 fathoms ladders, new ditto 25 feet long, horse whin, axle and socket pieces for horse whin, tram wagon, 80 fathoms bridge rail, six round buddles with driving gear complete, 30 bed frames, three hand frames, three water wheels, kieves, wheel and hand barrows, 50 tin sacks, iron 25 feet long, scales and six $\frac{1}{2}$ cwt. weights, carpenters' wood shed 40 x 18 $\frac{1}{2}$ x 10, store shed 15 x 14 x 8, sampling shed 10 x 8 x 7, dressing shed, 20 x 25 x 7, tin shed 15 x 15 x 7, carpenter's bench, miners' and other chests, grindstone, miners' tools, 24 cast steel hammers, cross cut saw, new and old timber, 4 tons coals, tailow, hemp, white yarn, dynamite, account house furniture, and numerous other effects in general use in mines.

To inspect the above apply to the Baillie in charge at the mine, for further particulars at the office of the Registrar in Truro.

CHILCOTT AND SON, Truro.

(Agents for Daniell and Thomas, Camborne.)

Dated Registrar's Office, Truro, 11th June, 1884.

IN LIQUIDATION.

TREWITTEN MINE.

In the Parish of St. Cleer, Cornwall.

W. J. MAY is instructed by the Official Liquidator to SELL BY AUCTION, on TUESDAY, June 24th, 1884, at Three o'clock P.M., at Webb's Hotel, Liskeard, subject to such conditions as shall then and there be produced.

THE TREWITTEN MINE,

Together with the valuable MACHINERY, BUILDINGS, AND MATERIALS thereon—also the LEASE of the said mine—as a going concern in One Lot.

The plant comprises 40 inch cylinder pumping engine with boilers, improved pneumatic winding engine with 50 fathoms of $\frac{3}{4}$ inch wire rope, pair of horizontal engines with 12 ton boilers and fittings, Tangy engine, Blake's stone breaker, rock drill apparatus, 3 inch Barrow drill, 24 heads of stamps, condensers by Harvey and Co., skip and skip road to bottom of shaft, 14 buddles with brick sides and cement floors, about 50 fathoms of 10 and 11 inch pitchwork, smith's shop, saw bench, tools, crab winch, office and fittings, changing house, and the usual requisites of a mine.

The above plant is of the best description and in thorough working order. The engine house and offices are all covered with galvanized iron.

The mine is situated in the parish of St. Cleer, west of the celebrated Phoenix Mines (whose lodges traverse the sett), and about six miles from Liskeard. The lease is held for an unexpired term of 21 years, from the 25th December, 1881, subject to a minimum rental of £20, merging in 1-18 royalty.

The above, from the locality and the congenital character of the strata, the extent of the sett and machinery, offers a rare opportunity for investment. The mining rights extend under 45 acres of land more or less.

To view apply on the mine any day prior to sale, and for further particulars to the Auctioneer; to Messrs. BLAIR and W. H. GIELING, solicitors, 3, Guildhall Chambers, Basinghall-street, London, E.C.; or A. E. JARVIS, Esq., 3, Guildhall Chambers, liquidator. Russell House, Liskeard, May 31st, 1884.

OLDBURY, NEAR BIRMINGHAM.**IN RE THE BROADWELL COLLIERY AND LAND COMPANY (LIMITED).****IN LIQUIDATION.**

By Order of the Liquidator, with the concurrence of the Mortgagors. TO IRONMASTERS, COAL PROPRIETORS, LAND AND BUILDING SOCIETIES, AND OTHERS.

VALUABLE FREEHOLD BUILDING LAND and an important FREEHOLD COLLIERY, with the mines and minerals, offices, engine house, engine plant, and effects of the Broadwell Colliery and Land Company (Limited), at Oldbury, near Birmingham, in the county of Worcester, which will (unless previously disposed of by Private Contract) BE SOLD, BY PUBLIC AUCTION, in Lots, by Mr. THOMAS COOKSEY, at the Talbot Hotel, Oldbury, on MONDAY, the 30th day of June, 1884, at Six o'clock in the evening. Particulars and conditions of sale, with plan annexed, may be obtained of Messrs. STONEHAM and Son, Solicitors, 5, Philpot-lane, London; and of the Auctioneer, Oldbury, near Birmingham.

IN LIQUIDATION.**WEST HOLWAY LEAD COMPANY (LIMITED).**

THE LIQUIDATOR is prepared to RECEIVE TENDERS for the PURCHASE of the MINING RIGHTS granted to the above company, extending over about 60 acres, situated in the parishes of Holway and Whiford, in the county of Flint, close to good roads and within easy access to Holway Station on the London and North-Western Railway.

Mine thoroughly equipped. No rent, and moderate royalty upon actual output only. Engine-shaft sunk to 145 yards. Lead ore proved at several levels. By further developing the vein at 110 yards it is believed large quantities of ore can be easily won.

The machinery—including three steam engines (makers, Barrow and Stewart, 14 horse power; Garrett, Marshall, and Co., 8 horse power; and a Chaplin and Co. 8 horse power)—is in good condition, and it is believed no further additions are necessary for effectual working.

A schedule of machinery may be seen at the office of the Liquidator; and conditions of sale and Forms of Tender may be obtained upon application to R. CHANDLER, Esq., Solicitor, 68, Bishopsgate-street Within; or of Messrs. THEOBALD BROTHERS and MALL, F.C.A., 23, St. Swithin's-lane, London; and of Mr. J. W. WORFOLK, at the Mines, Holway.

Tenders are to be delivered to the Liquidator, endorsed "Tenders for West Holway Lead Mines," on or before Twelve o'clock on Monday, the 7th day of July.

The Liquidator does not bind himself to accept the lowest or any tender.

ARTHUR MALL, F.C.A., Liquidator.

23, St. Swithin's-lane, London, 18th June, 1884.

PIT SINKING, WINDING COAL, PUMPING, &c.

PORTABLE STEAM ENGINE FOR SALE, with two 9 $\frac{1}{2}$ inch cylinders, and link motion reversing gear also gear to wind and pump.

A 9 H.P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required).

A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.

Apply to—

BARROWS AND STEWART, ENGINEERS, BANBURY.

HERBERTON (WILD RIVER) TIN LODES, NORTH QUEENSLAND.

Every information relative to the progress of lead-tin mining in the Wild River district (termed by geologists "The Cornwall of Australia") can be obtained by communicating with the undersigned.

CHARLES JENKIN.

Herberton Advertiser's Office Herberton, September, 1882.

COAL MINES REGULATION ACT, 1872.**EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.****DISTRICT UNDER THE CHARGE OF THOMAS BELL, Esq., H.M. INSPECTOR OF MINES.**

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 22nd and 23rd days of July, 1884, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must be on or before the 15th day of July, 1884, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

NOBEL'S DYNAMITE



Manufactured and sold by
NOBEL'S EXPLOSIVES COMPANY, LIMITED

(FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED).

Head Office: 149, West George Street, Glasgow.

EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.
FACTORIES—ARDEER WORKS, STEVENSTON, AYRSHIRE.

WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.
REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

TONITE, OR COTTON POWDER,

IS RECOMMENDED TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, AS BEING
THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing.

The Company manufacture

PATENT DETONATORS

of a quality much superior to the foreign article. Also supply Safety Fuse and Electric Firing Appliances of best description.
The trade supplied on favourable terms.

ADDRESS—THE COTTON POWDER COMPANY (LIMITED)

23, QUEEN ANNE'S GATE, LONDON, S.W.

WORKS: FAVERSHAM, KENT.

Agents: DINEEN and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B.; W. HARRISON, Barrow-in-Furness; W. J. PARRY, Bangor; HUNTER and FOTHERINGHAM, Glasgow.

RHENISH DYNAMITE COMPANY.



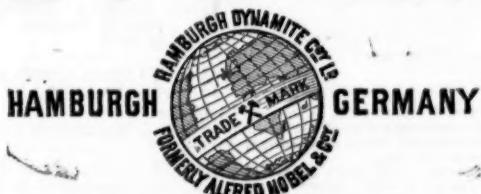
OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

OFFICES.—

1, Coleman Street Buildings, Moorgate Street, London, E.C.

LONDON AGENT.—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

NOBEL'S DYNAMITE.



MANUFACTURED AND SOLD BY THE

DYNAMIT-ACTIEN-GESELLSCHAFT
VORMALS ALFRED NOBEL & CO., HAMBURG.

(HAMBURG DYNAMITE COMPANY, LIMITED),

Formerly ALFRED NOBEL & CO.

Factories { KRÜMMEL AND SCHLEBUSCH, IN GERMANY.
ZAMKY AND PRESBURG, IN AUSTRIA HUNGARY.

LONDON OFFICE: 42, BASINGHALL STREET, E.C.



PATENT WIRE TRAMWAYS

Of all descriptions on the Single and Double-Rope Systems; Self-Acting, and Driven by Steam, Water, or Horse Power.

Carrying from 50 to 1000 tons per day. Over 150 miles erected in all parts of the world. For Particulars and Estimates apply to
W. T. H. CARRINGTON, 9, and 11, Fenchurch Avenue, London,

Removed from 78, Cheapside, E.C.

ENGINEER AND MANAGER TO THE OWNERS OF THE PATENTS FOR WIRE ROPE TRANSPORT.

For Excellence
and Practical Success
of Engines.



Represented by
Model exhibited by
this Firm.

HARVEY AND CO
(LIMITED)

ENGINEERS AND GENERAL MERCHANTS.
HAYLE, CORNWALL.

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF

PUMPING and other LAND ENGINES and MARINE STEAM ENGINES of the largest and most approved kinds in use, SUGAR MACHINERY,

MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

MANUFACTUREES OF

HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,
IN GOOD CONDITION, AT MODERATE PRICES—12.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES;

STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of

various sizes and descriptions; and all kinds of MATERIALS required for

MINING PURPOSES.

WATER JACKET E SMELTING FURNACES

PACIFIC IRON WORKS

RANKIN, BRAYTON, AND CO.,

For Copper and Argentiferous Galena Ores.

GENERAL OFFICE AND WORKS,

San Francisco, Cal., U.S.A.

BRANCH WORKS,—CHICAGO, ILLINOIS, U.S.A.

The Pacific Water Jacket Smelters embrace many features that are entirely new and of great practical utility, which are secured by letters patent.

No other furnaces can compare with these for durability, and in capacity for continuous and interrupted work.

More than One Hundred

of them are now running in the various mining districts of the United States, giving results never before obtained as regards continuous running, economy of fuel grade and quality of bullion produced.

These Smelters are shipped in a complete state, requiring no brick or stone work, thus saving great expense and loss of time in construction.

Complete smelting plants made to order, with all the improvements that experience has proved valuable in this class of machinery. Skilled and experienced smelters furnished when desired to examine mines and to superintend constructing and running of furnaces Estimates given upon application. Send for circular.

We refer to A. S. CHURCH, Esq., 118, LEADENHALL STREET, E.C., LONDON.

THE
BEST METAL FOR BUSHES,
BEARINGS,
SLIDE VALVES,

And other wearing parts of Machinery.

PUMPS, PLUNGERS,

CYLINDERS, &c.

PHOSPHOR BRONZE

WIRE, TUBES

SHEET, RODS

TOOLS &c.

STEAM

FITTINGS

SOLE

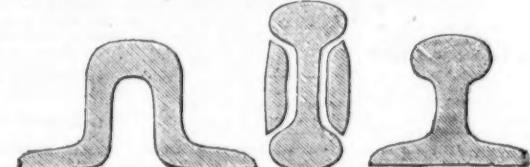
MANUFACTURE

UNDER PATENTS

THE

PHOSPHOR BRONZE
COMPANY, LIMITED,
SUMNER STREET, SOUTHWARK
LONDON, S.E.

JOHN BEATSON & SON,
40h, St. Mary's Gate, Derby.



IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per yard, new perfect, new slightly defective, or second-hand, with Fish-plates, Bolts and Nuts, Chairs, Spikes, and Points to match, when required.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.

BASES, PLATES, SHEETS, &c.

STEEL OF ALL KINDS. PIG IRON OF ALL KIND

Delivers at all Railway Stations and Ports in Great Britain.

INTERNATIONAL EXHIBITION
OF INDUSTRIAL PROGRESS
CHILE 1873

INTERNATIONAL EXHIBITION
OF INDUSTRIAL PROGRESS
CHILE 1873</p

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

	Paid.	Last wk.	Clos. pr.	Total divs.	Pw sk.	Last pd.
Shares.						
12000 Bedford Unit, * c. Tavistock (1211b.)	0 14 0	0 13 1/2	0 1 0	0 1 0	0 1 0	May 1884
3200 Blue Hills, t, St. Agnes	4 8 6	4 7 1/2	4 7 1/2	0 1 0	0 2 0	May 1881
6000 Carr Bress, t, Illogan	12 12 11	3 2 2 1/2	5 11 2 1/2	0 10 0	0 10 0	Nov. 1881
4000 Craggant Beck, t, Cardigan	5 0	—	5 0	0 5 0	0 5 0	Nov. 1882
10243 Devon Gt. Consols, c, a, Tavistock*	1 0 6 0	3 1/2 3 1/2	3 1/2 3 1/2	0 6 0	0 6 0	Dec. 1880
4700 Dolcoath, t, Camborne	10 14 10	71 67 1/2	71 67 1/2	38 6 0	1 10 0	May 1884
6400 East Pool, t, Illogan	0 9 41	39 41	39 41	0 12 0	0 12 0	Sept. 1883
12000 Great Holway, t, Llanfihangel	5 0	—	5 0	0 12 0	0 12 0	Sept. 1883
15000 Great Laxey, t, Isle of Man*	4 0 8 0	10 9 1/2	10 9 1/2	0 10 0	0 10 0	May 1884
6400 Green Hurl, t, Durham	0 5 5	5 5 1/2	5 5 1/2	0 5 0	0 5 0	May 1884
9230 Gunnislake (Clitters), t, c	2 2 2	—	2 2 2	0 19 0	0 2 0	Mar. 1882
2800 Isle of Man, t, Isle of Man*	25 0	—	25 0	83 5 0	1 0 0	Sept. 1880
6000 Killifret, t, Chacewater	4 3 8	16 14	16 14	0 14 6	0 2 0	Nov. 1882
20000 Leadhills, t, Lanarkshire	6 0	—	6 0	1 5 6	0 3 0	Sept. 1883
4000 Leibane, t, Cardiganshire	18 15 0	14 1/2	14 1/2	0 16 0	0 10 0	June 1883
10000 Melinacear, c, Hayle	2 0 6	13 1/2	13 1/2	2 4 3	0 0 0	Jan. 1884
9000 Miners' Mining Co., t, Wrexham	5 0 6	5 6	5 6	63 11 8	0 2 0	Feb. 1884
20200 Mining Co. of Ireland, c, t, r	7 0 0	—	7 0 0	24 0	0 0 0	Jan. 1880
11223 North Hendre, t, Wales	2 10 0	—	2 10 0	2 18 0	0 4 0	Nov. 1882
8146 Ditto	1 5 0	—	1 5 0	0 11 3	0 2 0	Nov. 1882
4760 Penhalls, t, St. Agnes	4 5 5	36 34	36 34	3 17 0	0 1 0	Jan. 1881
12000 Phoenix United, t, Linkinhorne	6 2 2	2 1/2 2	2 1/2 2	17 7 6	0 1 0	Aug. 1883
12000 Roman Gravels, t, Salop	7 10 0	3 1/2 2 1/2	9 11 0	0 5 0	0 5 0	May 1883
6123 South Conduff, t, Camborne	7 5 7	9 1/2 8 1/2	9 11 1 6	0 6 0	0 6 0	Apr. 1884
8000 South Darren, t, Cardigan	1 16 0	3 1/2 3 1/2	3 1/2 3 1/2	0 4 0	0 2 0	Apr. 1880
8000 Tincroft, t, Pool, Illogan	13 12 0	3 1/2 3 1/2	3 1/2 3 1/2	51 3 6	0 5 0	Dec. 1881
15000 Van, t, Llandilo	4 5 0	2 1/2 1/2	2 1/2 1/2	25 13 0	0 2 0	Jan. 1883
15000 West Holway, t, Llanfihangel	1 0 0	—	1 0 0	1 0 0	1 0 0	Oct. 1881
6000 West Bassett, t, Illogan	7 10 4	4 1/2 4	4 1/2 4	28 3 8	0 8 0	Apr. 1884
8000 West Kitty, t, St. Agnes	0 12 0	12 11 12	12 11 12	2 9 0	0 10 0	Mar. 1884
6000 Wheat Agar, c, Illogan	19 5 0	17 15 16	19 5 0	0 5 0	0 5 0	Apr. 1884
12000 Wheal Crebwr, c, Tavistock	2 4 0	13 1/2 13 1/2	1 1 3	0 2 0	0 2 0	Nov. 1884
1024 Wheal Eliza Consols, t, St. Austell	18 0 0	—	18 0 0	59 0 0	0 1 0	Nov. 1883
6000 Wheal Grenville, t, Camborne	15 0 0	6 1/2 6	6 1/2 6	2 0 0	0 2 0	June 1884
4235 Wheal Kitty, t, St. Agnes	5 12 0	3 1/2 3 1/2	12 18 6	0 1 0	1 8 0	Jan. 1881
3000 Wheal Peevor, t, Redruth	13 13 0	1 1/2 1 1/2	8 13 6	0 4 0	0 4 0	Mar. 1881

FOREIGN DIVIDEND MINES.

	Paid.	Last wk.	Clos. pr.	Total divs.	Pw sk.	Last pd.
35500 Alamillo, t, Spain*	2 0 0	—	13 1/2 13 1/2	2 15 2 0	0 2 0	Mar. 1884
13000 Almada and Tirito Consol., st*	1 0 0	—	3 1/2 3 1/2	0 6 0	0 1 0	May 1887
20000 Australian, c, South Australia*	7 7 5	2 1/2 2 1/2	1 1 9	6 0	0 2 0	Aug. 1883
15000 Birdseye Creek, g, California*	4 0 0	1 3 1/2	1 1 7	0 0 2	0 0 0	June 1884
30000 Bratsberg, c, Norway*	2 0 0	—	13 1/2 13 1/2	0 4 4 0	0 1 0	Mar. 1884
13000 California, g, Colorado	1 0 0	—	3 1/2 3 1/2	0 2 0	0 1 0	Aug. 1884
20000 Cape Copper Mining,* South Africa	8 0 0	—	45 45	57 17 6	0 1 18	June 1884
65000 Colorado, s-t, Colorado*	5 0 0	2 1/2 2 1/2	0 14 6	0 1 0	0 0 0	May 1883
50000 Copiapo, c, Chile? (24 shares)*	3 10 0	2 1/2 2 1/2	2 1/2 2 1/2	0 1 0	0 0 0	June 1884
70000 English & Australian, c, B. Aust.*	2 10 0	—	7 5 7 5	3 2 2 9	0 1 0	Mar. 1884
2000 Eng.-Aus., g, Vict. pref. (20000 o.p.)	1 0 0	—	0 3 8 0	0 3 8 0	0 3 8 0	Apr. 1882
25000 Fortune, t, Spain*	2 0 0	—	3 1/2 3 1/2	8 11 5 0	0 2 0	Mar. 1884
72000 Frontino & Bolivia, g, New Gran.*	2 0 0	—	3 1/2 3 1/2	0 12 0	0 1 0	Dec. 1883
40000 La Plata, t, Leadville	1 0 0	—	3 1/2 3 1/2	0 6 0	0 0 0	Oct. 1882
50000 Linares, t, Spain*	3 0 0	—	3 1/2 3 1/2	19 10 4	0 3 0	Mar. 1884
20000 Marbella Iron Ore, t, Spain	10 0 0	2 1/2 2 1/2	2 1/2 2 1/2	0 10 0	0 10 0	June 1884
185164 Mason & Barry, c, Portugal	10 0 0	—	9 1/2 9 1/2	3 15 0	0 15 0	Apr. 1884
100000 Oxford, t, Nova Scotia	0 4 0	—	0 1 3/2 0	0 0 1 1/2	0 0 0	Mar. 1884
8085 Quebrada Rail, Land & Co. Venezuela	10 0 0	—	4 1/2 4 1/2	6 per cent.	0 0 0	1882
50000 Paulicillo, c, Chile?	4 0 0	5 1/2 5 1/2	2 0 9 0	0 2 0	0 2 0	May 1884
25000 Pitangui, g, Brazil (in \$6000 £1 pd.)	10 0 0	—	0 1 0	0 1 0	0 1 0	Sept. 1882
1400 Pontigbaud, t, France	20 0 0	8 8	30 3 1	0 11 0	0 1 11	Dec. 1882
100000 Port Phillip, g, Clunes? (24 shares)	1 0 0	—	3 1/2 3 1/2	0 1 0	0 1 0	Feb. 1882
50000 Rara Fortuna, t, Argent. Republic	1 0 0	—	0 3 0	0 1 0	0 1 0	July 1882
84000 Richmond Consol., s, Nevada?	5 0 0	3 1/2 3 1/2	14 15 6	0 5 0	0 5 0	Aug. 1883
24532 Rio Tinto, c, Mortgage Bds., Huelva, 100	0 101	—	99 101	5 per cent.	0 0 0	Apr. 1884
22500 Rio Tinto, c, Mortgage Bds., Huelva, 100	10 0 0	—	17 15 15	4 6 0	0 10 0	May 1884
40000 Santa Barbara, g, Brazil	10 0 0	—	0 12 9 0	0 1 0	0 1 0	May 1884
12200 Schwabs Gully, d, Kimberley	10 0 0	—	8 1/2 7 1/2	12 6 0	0 10 0	Aug. 1884
12000 Scottish-Australian Mining Co. t, *t	1 0 0	—	2 1/2 2 1/2	15 p. cent.	0 1 0	Nov. 1881
80000 Ditto, New	0 10 0	—	13 1/2 13 1/2	2 1/2 2 1/2	0 9 0	Nov. 1883
22500 Sierra Buttes, g, California?	2 0 0	—	13 1/2 13 1/2	2 6 6 0	0 0 0	Apr. 1884
40625 Ditto, Plumas Eureka	2 0 0	—	12 1/2 12 1/2	3 2 0 0	0 2 0	Apr. 1884
253000 St. John del Rey? (25 Stock and multiple deal in) ...	55 65	—	5 p. c. for half-year, June	1882	0 0 0	1882
180000 Tambacherry, g, Wynnaid	1 0 0	—	0 0 0	0 0 0	0 0 0	Aug. 1884
62500 Tharsis, c, su, Spain (58730 issued)?	2 0 0	—	5 6 5 6	8 18 18 0	0 11 0	May 1883
14000 Tolima, g, Colombia (A shares)	5 0 0	—	9 1/2 9 1/2	4 15 6 0	0 10 0	June 1884
6000 Ditto (B shares)	5 0 0	7 0	6 7	—	—	—
25000 Victoria? (London), g, Australia	1 0 0	—	0 13 10	0 0 0	0 0 0	Feb. 1881
124221 United Mexican, t, Mexico	9 17 6	4 4 4	4 4 4	0 2 6 0	0 2 6 0	May 1884
100000 Victorine (Nevada), s, Mexico	1 0 0	—	0 2 0 0	0 0 0	0 0 0	June 1882
15000 Western Andes, s, Colombia	5 0 0	5 5 5	4 3 5 5 5	4 5 9 0 0	2 6 Oct. 1882	1882
21000 W. Prussian (5500 pref. sh. £1						